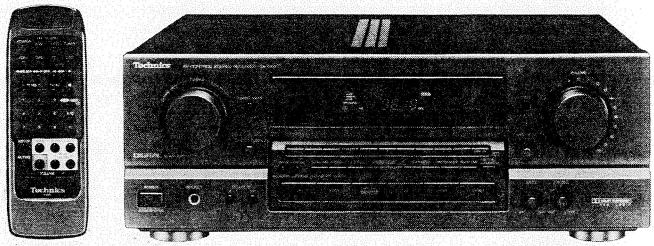
Technics

AV control stereo receiver

SA-GX670
SA-GX470/SA-GX370

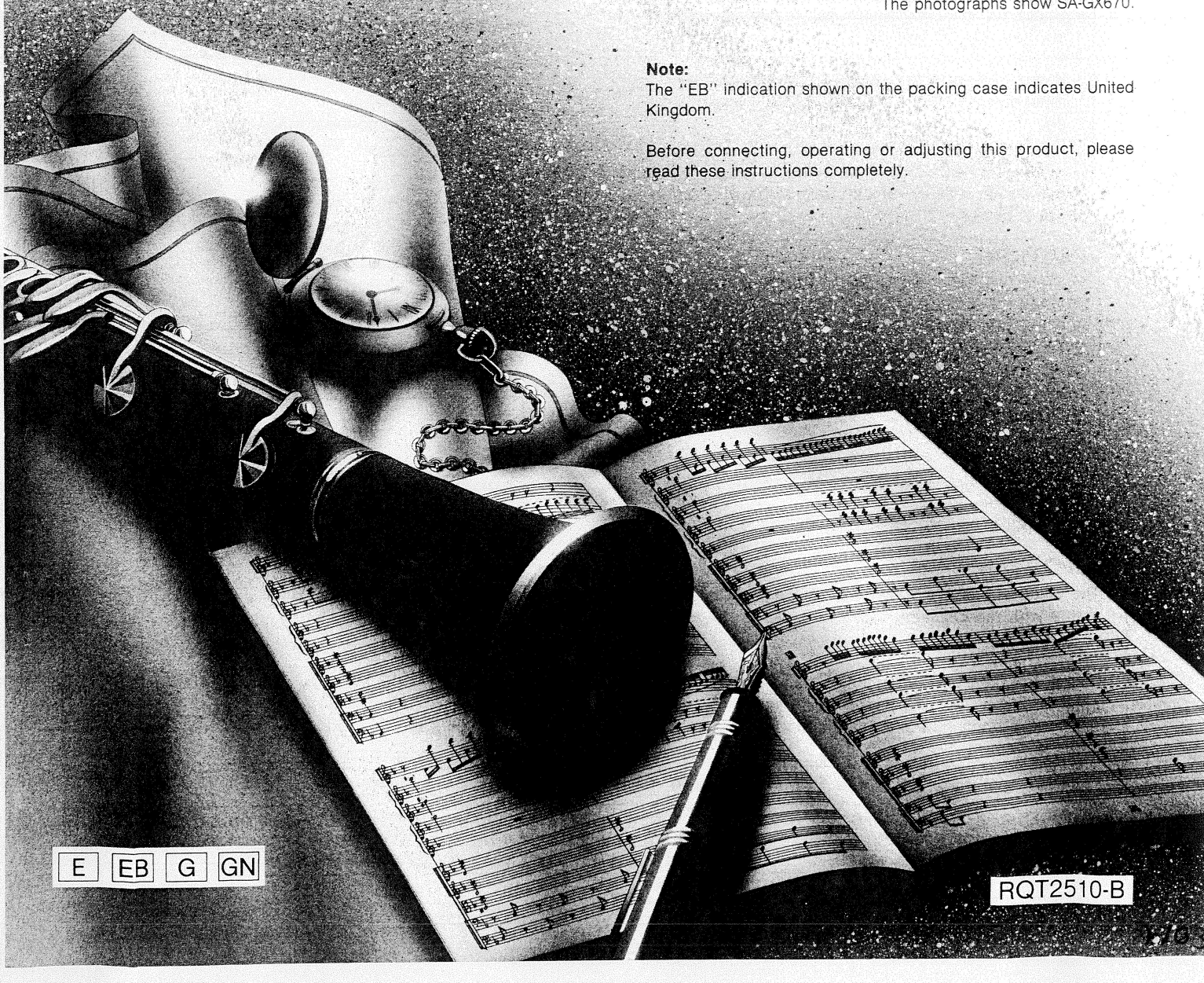
Operating Instructions



The photographs show SA-GX670.

Note:
The "EB" indication shown on the packing case indicates United Kingdom.

Before connecting, operating or adjusting this product, please read these instructions completely.



E EB G GN

RQT2510-B

Dear Customer

Thank you for purchasing this Technics product.
For optimum performance and safety, please read these instructions carefully.

These operating instructions are applicable to models SA-GX670, SA-GX470 and SA-GX370.
These operating instructions, however, are intended primarily for model SA-GX670.

(For areas except United Kingdom, Europe, Australia and N.Z.)

CAUTION:
The AC voltage differs according to the area. Be sure to set the proper voltage in your area before use.
(For details, please refer to the page 8.)

Caution for AC mains lead

(United Kingdom only)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ⓐ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

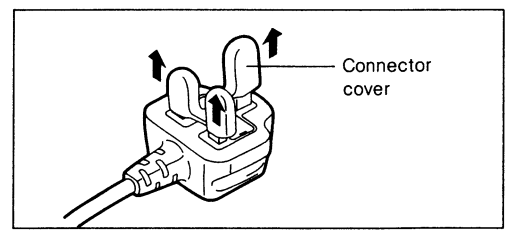
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚ .

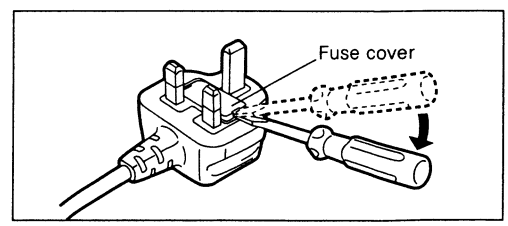
Before use

Remove the connector cover as follows.

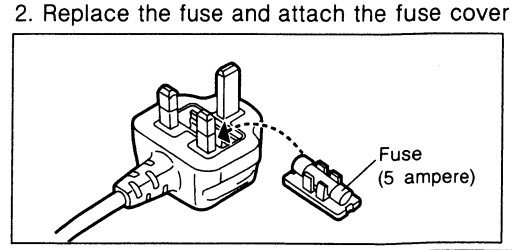


How to replace the fuse

1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover



(For Australia and N.Z.)

THIS TUNER/RECEIVER IS CAPABLE OF RECEIVING THE NEW AM STEREO BROADCASTS FROM THE AM BAND RADIO STATIONS. HOWEVER LIKE MANY TUNERS AND RECEIVERS CURRENTLY AVAILABLE ON THE MARKET IT WILL REPRODUCE THIS AM STEREO SIGNAL ONLY IN AM MONO, WHICH, IN EFFECT, IS OF NO LESSER QUALITY THAN YOUR EXISTING AM MONO TUNER/RECEIVER.

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Reference

Troubleshooting guide ..... **Back cover**

Suggestions for safety

Placement

Avoid placing the unit in areas of:
- direct sunlight
- high temperature
- high humidity
- excessive vibration
- uneven surfaces (Place the unit on a flat level surface.)

Such conditions might damage the cabinet and/or other component parts and thereby shorten the unit's service life.

Ventilation

- Place the unit in a well ventilated position at least 10 cms away from wall surfaces etc.
- Ensure that curtains and similar materials do not obstruct the ventilation holes.

Stacking

Never place heavy items on top of the unit or the power cord.

Voltage

- It is very dangerous to use an AC power source of high voltage such as for an air conditioner.
  A fire might be caused by such a connection.
- A DC power source can not be used.
  Be sure to check the power source carefully, especially on a ship or other place where DC is used.

Power cord protection

- Avoid cuts, scratches or poor connection of the AC mains cord, as this may result in fire or electric shock hazard.
  Excessive bending, pulling or slicing of the cord should also be avoided.
- Do not pull on the cord when you are disconnecting the power, as this could cause an electric shock. Grasp the plug firmly when you disconnect the power supply.
- Never touch the plug with wet hands or a serious electric shock could result.

Foreign materials

- Ensure that no foreign objects, such as needles, coins, screwdrivers etc., accidentally fall into the unit or through the ventilation holes.
  Otherwise, a serious electric shock or malfunction could occur.
- Be extremely careful about spilling water or liquid on/into the unit, as a fire or electric shock could occur.
  (Disconnect the power plug and contact your dealer immediately if this occurs.)
- Avoid spraying insecticides onto the unit as they contain flammable gases which can be ignited.
- In secticides, alcohol, paint thinner and similar chemicals should never be used to clean the unit as they can cause flaking or cloudiness to the cabinet finish.

Maintenance

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution.

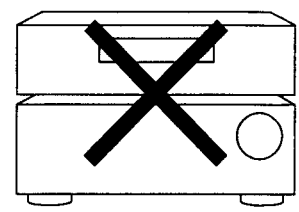
Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Service

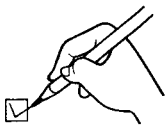
- Never attempt to repair, disassemble or reconstruct the unit if there seems to be a problem.
  A serious electric shock could result if you ignore this precautionary measure.
- If a problem occurs during operation (the sound is interrupted, indicators fail to illuminate, smoke is detected, etc) contact your dealer or Authorized Service Center immediately.
- Disconnect the power supply if the unit will not be used for a long time. Otherwise the operation life could be shortened.

CAUTION

Do not place a tape deck or CD player on top of this unit. Heat radiated from the top of this unit may cause damage to the tape or CD software.



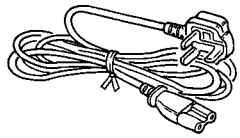
Accessories



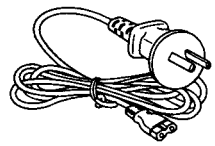
Please check and identify the supplied accessories

☐ AC power supply cord ..... 1 pc.

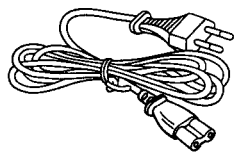
(For United Kingdom)
(VJA0733)



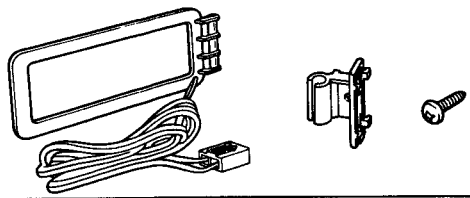
(For Australia and N.Z.)
(RJA0036-K)



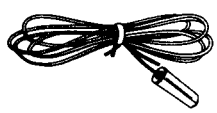
(For others)
(RJA0019-2K)



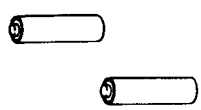
☐ AM loop antenna set (RSA0010)
- AM loop antenna ..... 1 pc.
- AM antenna holder ..... 1 pc.
- Screw ..... 1 pc.



☐ FM indoor antenna (RSA0007) ..... 1 pc.



☐ Batteries (UM-4, "AAA", R03) ..... 2 pcs.



☐ Remote control transmitter ..... 1 pc.

For SA-GX670 (For United Kingdom and Europe)/SA-GX470/ SA-GX370

(RAK-SA114XH)

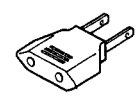
For SA-GX670 (For areas except United Kingdom and Europe)

(RAK-SA704XH)

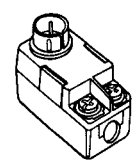
For details on remote control transmitter operation, refer to "How to use the remote control transmitter" in the separate booklet.

☐ Attachment plug (SJP9009) ..... 1 pc.
(United Kingdom only)

☐ Power plug adaptor (SJP5213-2) ..... 1 pc.
(Not supplied for United Kingdom, Europe, Australia and N.Z.)

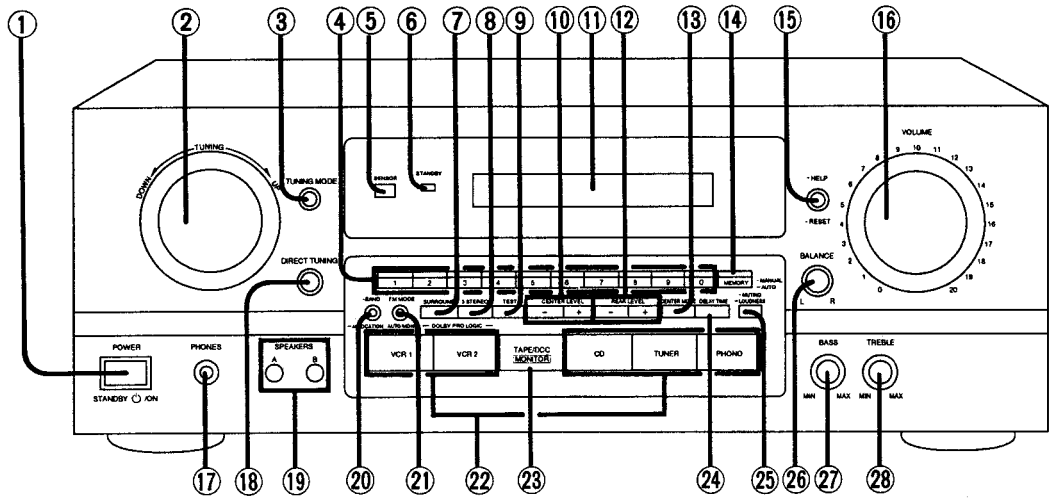


☐ Antenna plug (RFE0014) ..... 1 pc.
(Not supplied for United Kingdom and Europe)



Front panel controls

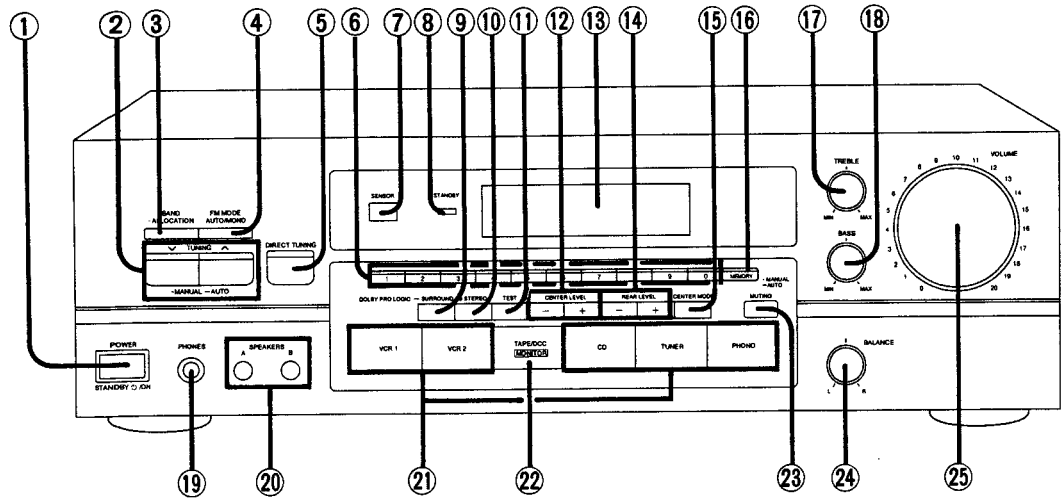
For SA-GX670



No.	Name	Ref. page
①	**Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	*14*
②	**Tuning control (TUNING)**	*17*
③	**Tuning mode select button (TUNING MODE)**	*17*
④	**Numeric buttons (1–0)**	*16,19,20*
⑤	**Remote control signal receptor (SENSOR)**	–
⑥	**"STANDBY" indicator** When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.	–
⑦	**DOLBY PRO LOGIC SURROUND ON/OFF button (SURROUND)**	*21,22,23*
⑧	**DOLBY PRO LOGIC 3 STEREO ON/OFF button (3 STEREO)**	*21,22,23*
⑨	**Test signal ON/OFF button (TEST)**	*22*
⑩	**Center level adjust button (CENTER LEVEL)**	*22*
⑪	**Display**	–
⑫	**Rear level adjust button (REAR LEVEL)**	*22*

No.	Name	Ref. page
⑬	**Center mode select button (CENTER MODE)**	*21*
⑭	**Memory button (MEMORY)**	*19*
⑮	**Help/reset button (-HELP –RESET)**	*15,26*
⑯	**Volume control (VOLUME)**	*14*
⑰	**Headphone jack (PHONES)**	*15*
⑱	**Direct tuning button (DIRECT TUNING)**	*16*
⑲	**Speaker select buttons (SPEAKERS)**	*14*
⑳	**Band select button (BAND)**	*16*
㉑	**FM mode select button (FM MODE)**	*16*
㉒	**Input select buttons**	*14*
㉓	**Tape/DCC monitor button (TAPE/DCC MONITOR)**	*14,24*
㉔	**Delay time adjust button (DELAY TIME)**	*23*
㉕	**Muting/loudness button (-MUTING –LOUDNESS)**	*15*
㉖	**Balance control (BALANCE)**	*15*
㉗	**Bass control (BASS)**	*15*
㉘	**Treble control (TREBLE)**	*15*

For SA-GX470/SA-GX370



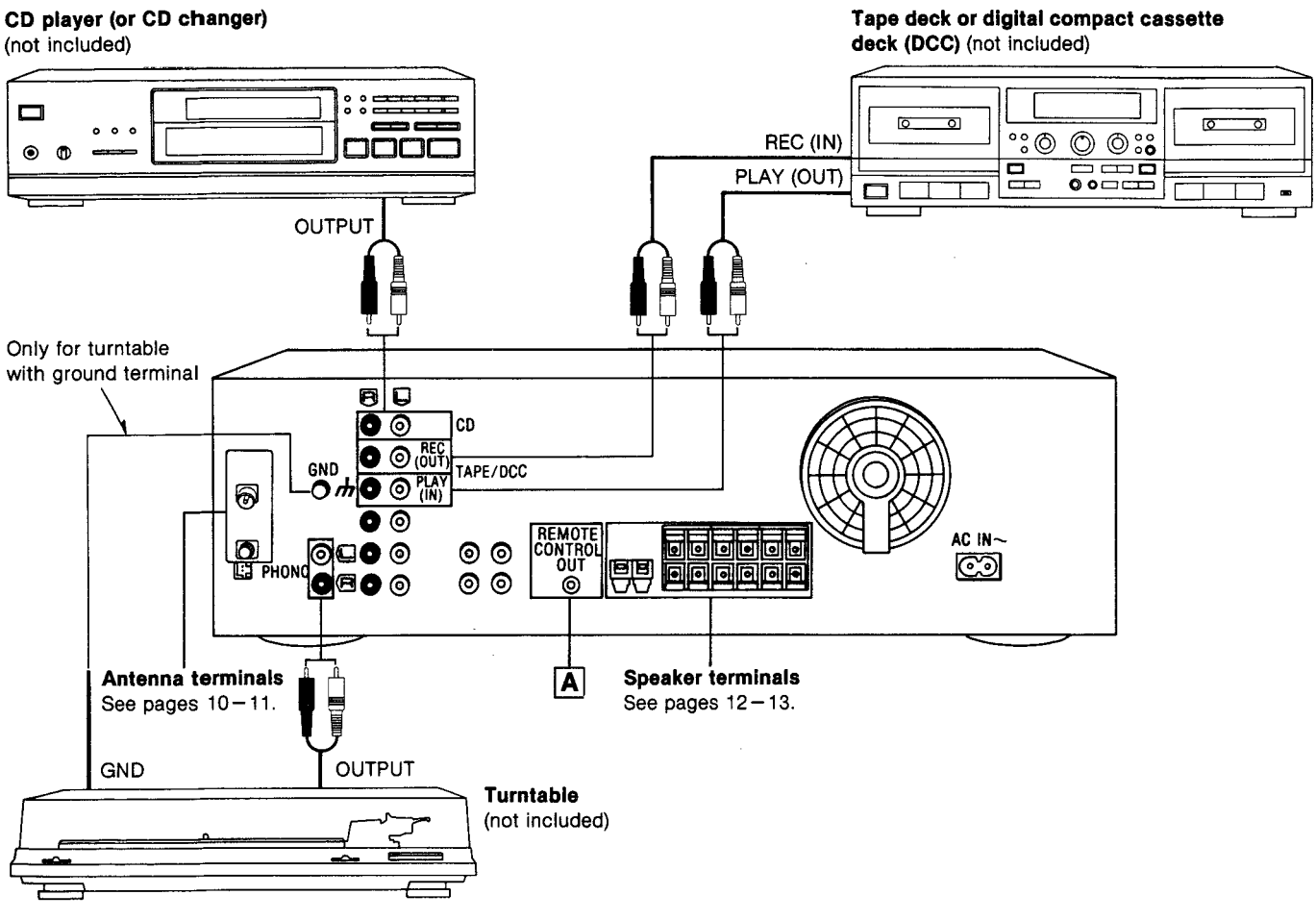
No.	Name	Ref. page
①	**Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)** Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.	*14*
②	**Tuning control (TUNING)**	*18*
③	**Band select button (BAND)**	*16*
④	**FM mode select button (FM MODE)**	*16*
⑤	**Direct tuning button (DIRECT TUNING)**	*16*
⑥	**Numeric buttons (1 – 0)**	*16,19,20*
⑦	**Remote control signal receptor (SENSOR)**	–
⑧	**"STANDBY" indicator** When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.	–
⑨	**DOLBY PRO LOGIC SURROUND ON/OFF button (SURROUND)**	*21,22,23*
⑩	**DOLBY PRO LOGIC 3 STEREO ON/OFF button (3 STEREO)**	*21,22,23*
⑪	**Test signal ON/OFF button (TEST)**	*22*

No.	Name	Ref. page
⑫	**Center level adjust button (CENTER LEVEL)**	*22*
⑬	**Display**	–
⑭	**Rear level adjust button (REAR LEVEL)**	*22*
⑮	**Center mode select button (CENTER MODE)**	*21*
⑯	**Memory button (MEMORY)**	*19*
⑰	**Treble control (TREBLE)**	*15*
⑱	**Bass control (BASS)**	*15*
⑲	**Headphone jack (PHONES)**	*15*
⑳	**Speaker select buttons (SPEAKERS)**	*14*
㉑	**Input select buttons**	*14*
㉒	**Tape/DCC monitor button (TAPE/DCC MONITOR)**	*14,24*
㉓	**Muting button (MUTING)**	*15*
㉔	**Balance control (BALANCE)**	*15*
㉕	**Volume control (VOLUME)**	*14*

Equipment connections

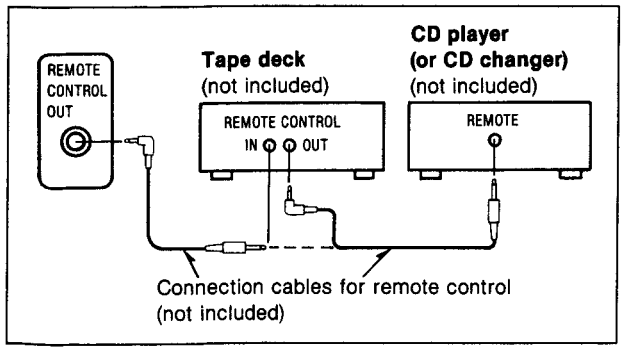
Connecting audio equipment

Stereo connection cable (not included)
White (L)
Red (R)



A "REMOTE CONTROL OUT" terminal

Connect the connection cable for the remote control to a Technics tape deck and/or CD player (or CD changer) which has the appropriate remote control terminal as shown below. If a tape deck is not being used, the CD player (or CD changer) can be connected directly (dotted line).

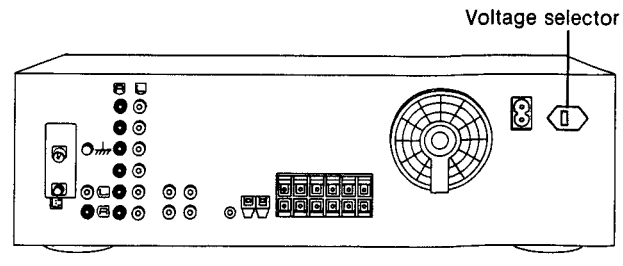


For a CD player (or CD changer) with a remote control sensor the above connection is not necessary.

To set the power voltage

(For areas except United Kingdom, Europe, Australia and N.Z.)
Set the voltage selector to the voltage setting for the area in which the unit will be used.

Note
Note that this unit will be seriously damaged if this setting is not made correctly.



Connecting video equipment

Stereo connection cable (not included)
White (L)
Red (R)

Second VCR (for playback only)
(not included)

Monitor TV
(not included)

Video connection cables
(not included)

VIDEO
IN

AUDIO
OUT

VIDEO
OUT

TV
MONITOR

VCR2
IN
OUT

VCR1
IN

IN OUT
AUDIO

IN OUT
VIDEO

AC IN~

Cooling fan
The cooling fan operates at high power output levels only.

Video connection cables
(not included)

AUDIO
IN

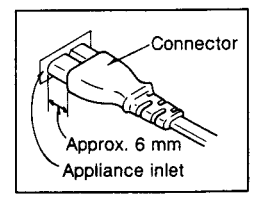
AUDIO
OUT

VIDEO
OUT

VIDEO
IN

VCR
(not included)

(For areas except Australia and N.Z.)



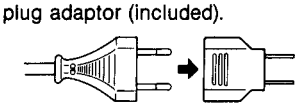
Even when the connector is perfectly inserted, the front part of the connector jut out as shown in the drawing. However there is no problem using the unit.

AC power supply cord
(included)

Connect this cord after all other cables and cords are connected.

Household
AC outlet

(United Kingdom only)
BE SURE TO READ THE CAUTION FOR THE AC POWER SUPPLY CORD ON PAGE 2 BEFORE CONNECTION.
(For areas except United Kingdom, Europe, Australia and N.Z.)
If the power plug will not fit your socket, use the power plug adaptor (included).



To connect a video deck with 21 pin scart terminal

This unit

VCR (not included)

AV IN

AUDIO
IN

AUDIO
OUT

VIDEO
OUT

VIDEO
IN

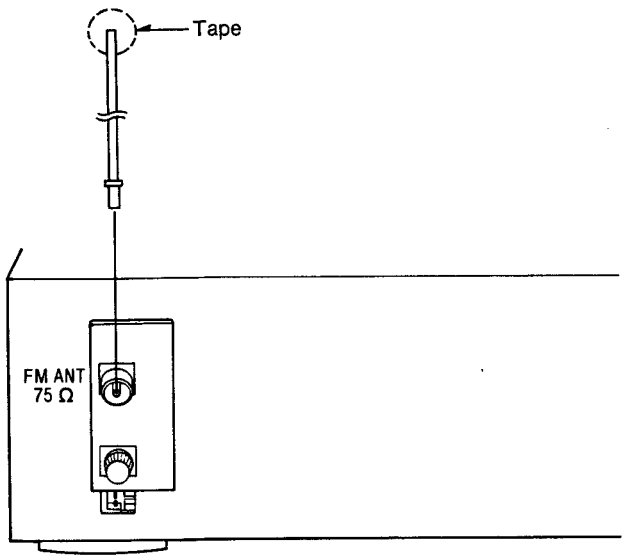
21 pin scart cable (not included)

Antenna connections

FM indoor antenna *(included)*

This antenna is normally sufficient for reception of FM broadcasts.

FM indoor antenna
(included)



Attach to a wall (using a tape) facing in the direction of best reception.
For best reception sound quality:
An FM outdoor antenna is recommended.
Disconnect the antenna if an FM outdoor antenna is installed.

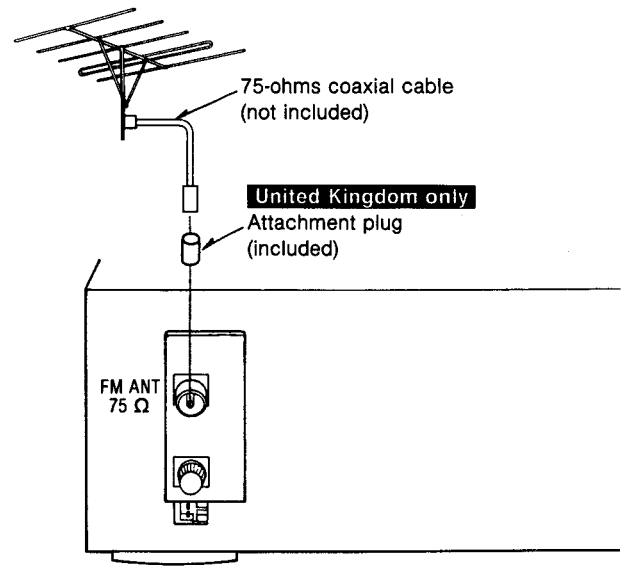
FM outdoor antenna *(not included)*

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the FM indoor antenna (included) does not provide satisfactory reception.

Note
An outdoor antenna should be installed by a qualified technician only.

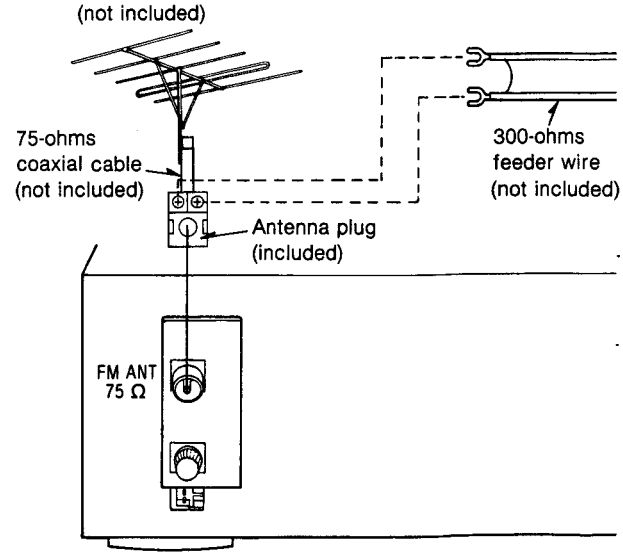
For United Kingdom and Europe

FM outdoor antenna
(not included)



For areas except United Kingdom and Europe

FM outdoor antenna
(not included)



See page 11 for using the antenna plug (included).

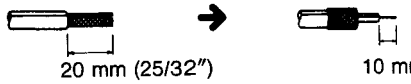
■ How to use the antenna plug (included)

(For areas except United Kingdom and Europe)

Two types of wire are most commonly used for connection from the antenna: 300-ohms parallel feeder wire or 75-ohms coaxial cable. For best resistance to outside interference, the use of 75-ohms coaxial cable is suggested.

To connect a 75-ohms coaxial cable

① Remove a piece of the outer vinyl insulator.

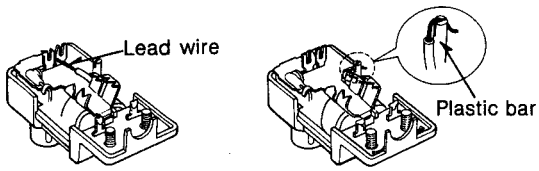


② Remove the cover while pulling the tabs.

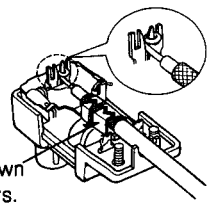
Note

If the tabs are pulled too hard, the casing may be damaged.

③ Remove the lead wire and clamp it with the plastic bar.



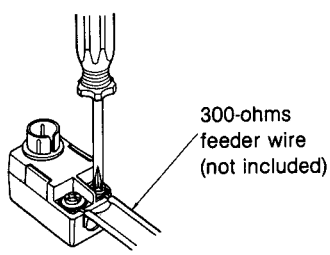
④ Install the coaxial cable.



Clamp the cable conductor, and wind it on so that it doesn't contact anything else.

⑤ Attach the cover.

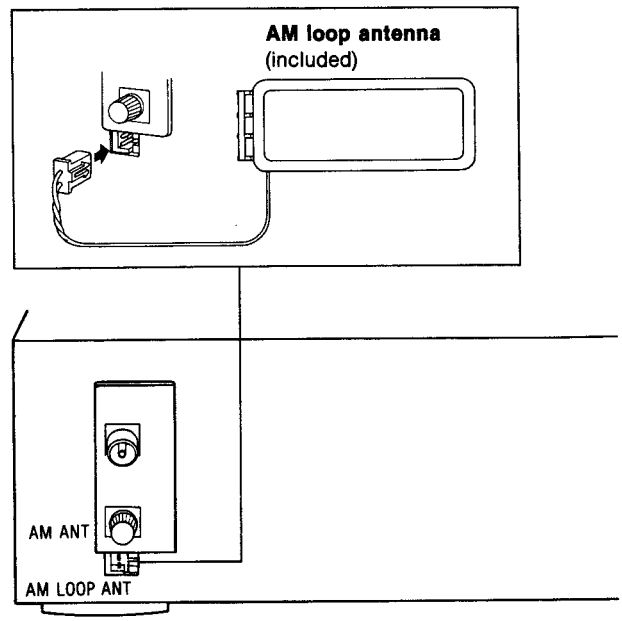
To connect a 300-ohms feeder wire



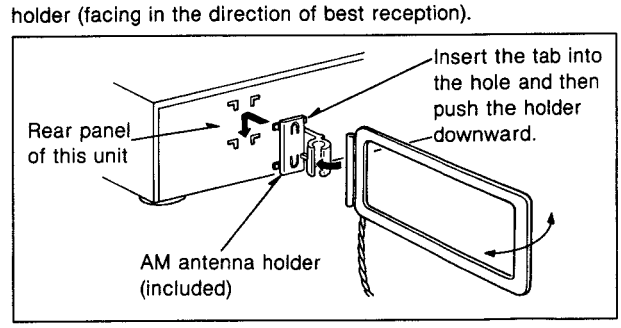
Loosen the screw to connect the feeder wire and tighten it to secure the connection.

AM loop antenna (included)

This antenna is normally sufficient for reception of MW/LW broadcasts.

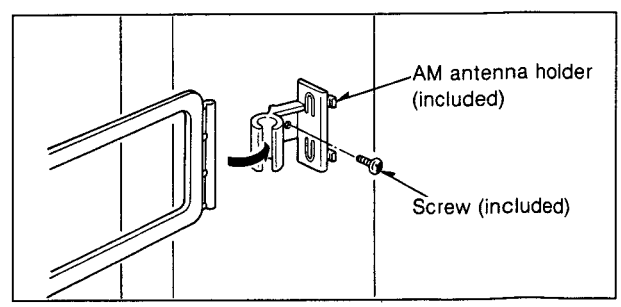


Install the AM antenna holder (included) at the rear panel of this unit and then attach the AM loop antenna to the AM antenna holder (facing in the direction of best reception).



When mounting the antenna to a column, a wall or rack

Mount it vertically.



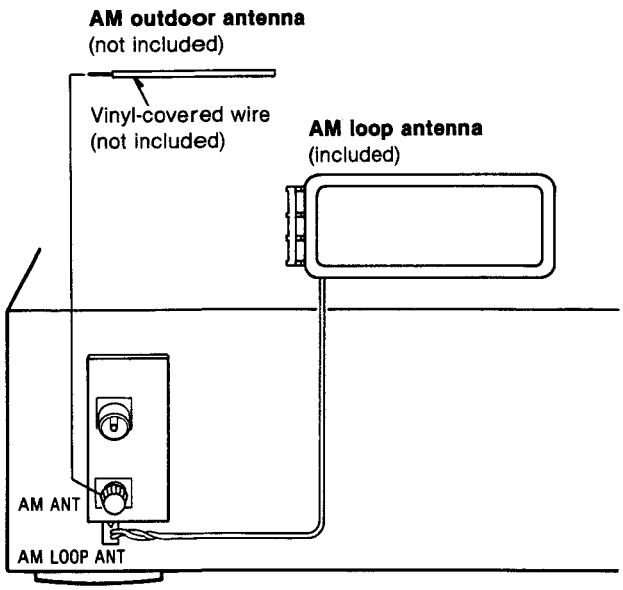
Pay attention to the following points when mounting the antenna.

- Do not mount it horizontally (doing so will impair reception).
- Do not mount it close to power cords, speaker wires or metal surfaces (doing so will result in noise).
- Do not mount it close to a tape deck. When the tape deck is being used, chirping or beeping sounds may result.

Antenna connections

AM outdoor antenna *(not included)*

The outdoor antenna should be used when using the main unit in mountainous areas or in spaces enclosed by reinforced concrete where the AM loop antenna (included) does not provide satisfactory reception.



Use 5 – 12 m of vinyl-covered wire horizontally at the window, or the convenient location.

When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.

Note

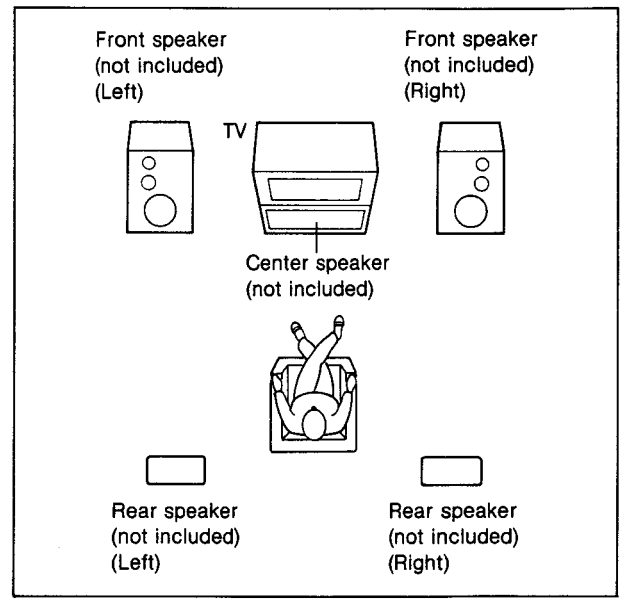
Be sure to connect the AM loop antenna even when an outdoor antenna is used.

Speaker connections

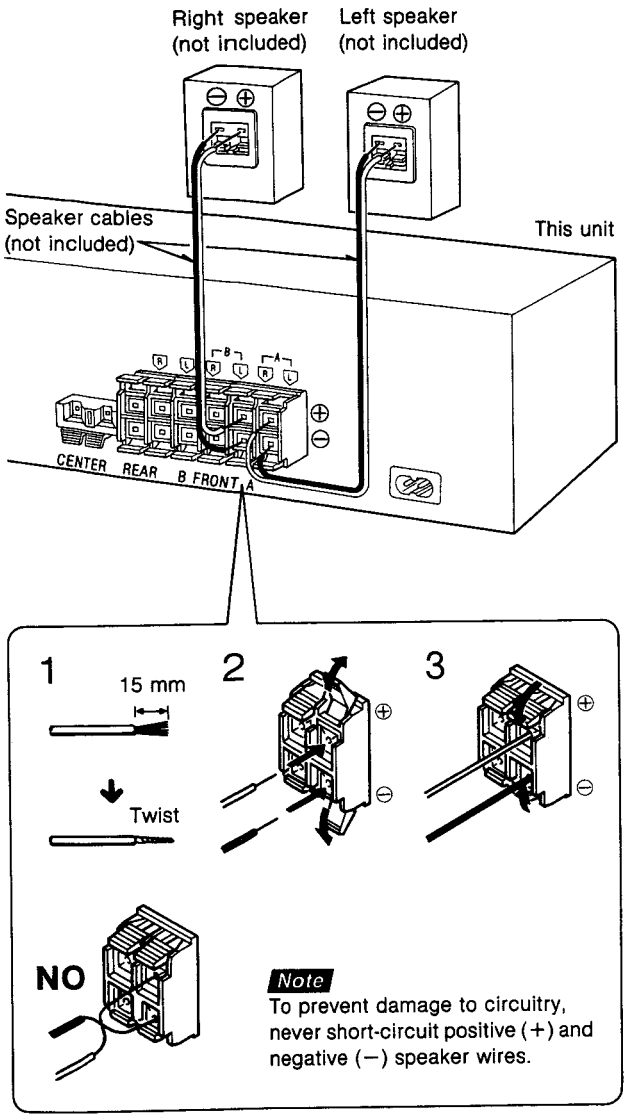
Placement of speakers

As well as enjoying normal stereo reproduction with both the left and right front speakers connected, a center speaker and rear speakers can also be connected to the main unit in order to enjoy playback using the Dolby Pro Logic Systems.

The illustration below shows where to place the speakers when enjoying sound with Dolby Pro Logic systems.
The listening position at which the effect is the greatest is a position slightly to the rear of a center position of five-speaker systems.
However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.



Connection of front speakers



Note
To prevent damage to circuitry, never short-circuit positive (+) and negative (−) speaker wires.

■ "B" terminals

For connection to a second pair of speakers.

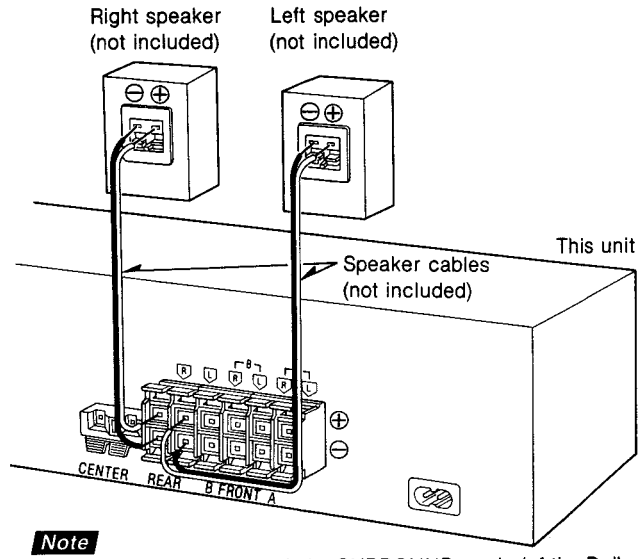
■ Speaker impedance

When only the "A" or only the "B" speakers are connected:

(For United Kingdom and Europe)	4−16 Ω
(For others)	8−16 Ω

When both the "A" and the "B" speakers are connected simultaneously: 8−16 Ω

Connection of rear speakers

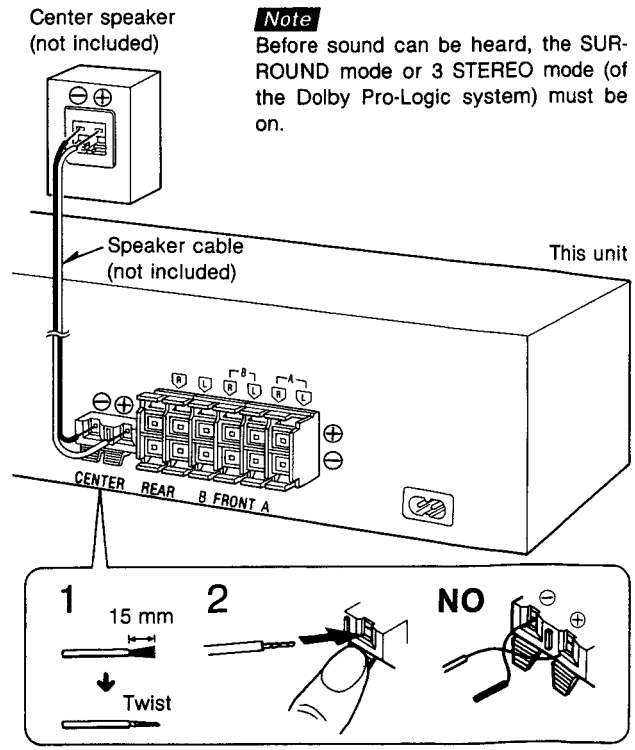


Note
Before sound can be heard, the SURROUND mode (of the Dolby Pro-Logic system) must be on and both rear speakers must be connected.

■ Speaker impedance

For SA-GX470	
(For United Kingdom and Europe)	4−16 Ω
(For others)	8−16 Ω
For SA-GX670/SA-GX370	4−16 Ω

Connection of center speaker

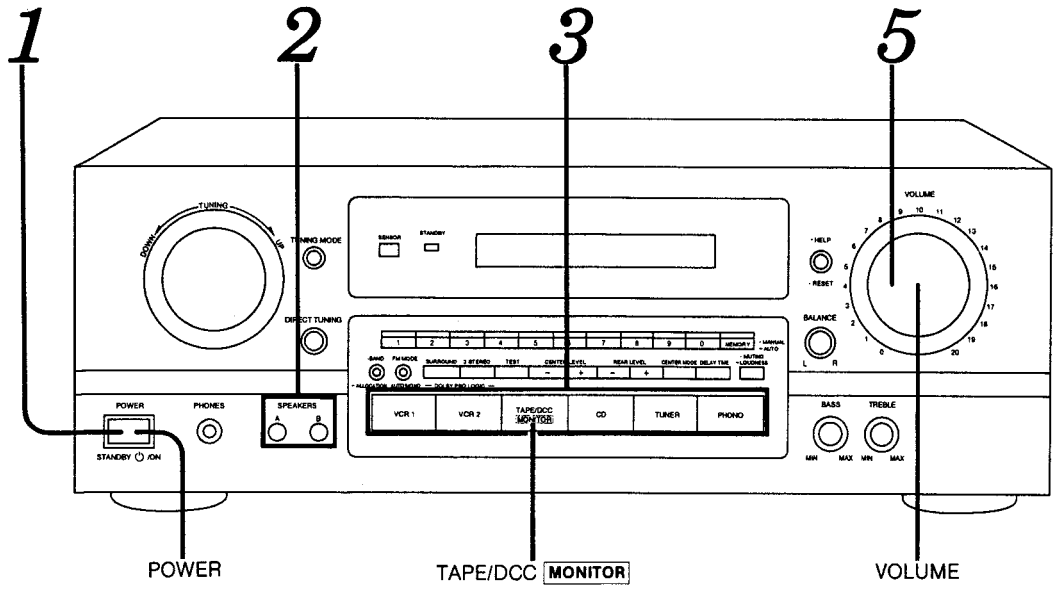


Note
Before sound can be heard, the SURROUND mode or 3 STEREO mode (of the Dolby Pro-Logic system) must be on.

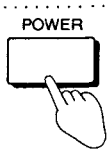
■ Speaker impedance

(For United Kingdom and Europe)	4−16 Ω
(For others)	8−16 Ω

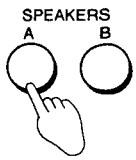
Basic operations



- Before operation, set VOLUME to the "0" position.
- When viewing a video, turn on the power supply for the TV and set the TV to video mode.

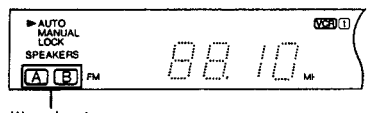
1 

Press POWER to switch on the power.

2 

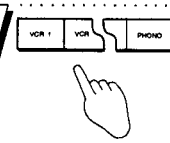
Press A and/or B to select the speaker system(s) to be used.

A and B refer to the speaker terminals at the rear of the unit.



Illuminates

If the button is pressed once more, the indicator will switch off and no sound will be heard from the speakers.

3 

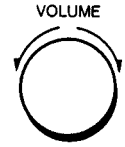
Press to select the desired source.

VCR 1: To watch video tapes (VCR 1)
VCR 2: To watch video tapes (VCR 2)
TAPE/DCC: To listen to tape or MONITOR digital compact cassette (DCC)
The tape monitor indicator will appear. (See below.)
CD: To listen to compact discs
TUNER: To listen to radio broadcasts
PHONO: To listen to phono discs

4

Start the desired source.

(Refer to the appropriate operating instructions for details.)

5 

Turn VOLUME to adjust the volume level.

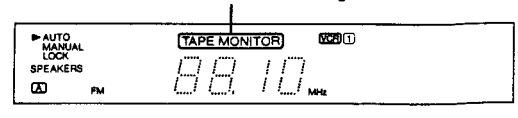
After listening is finished

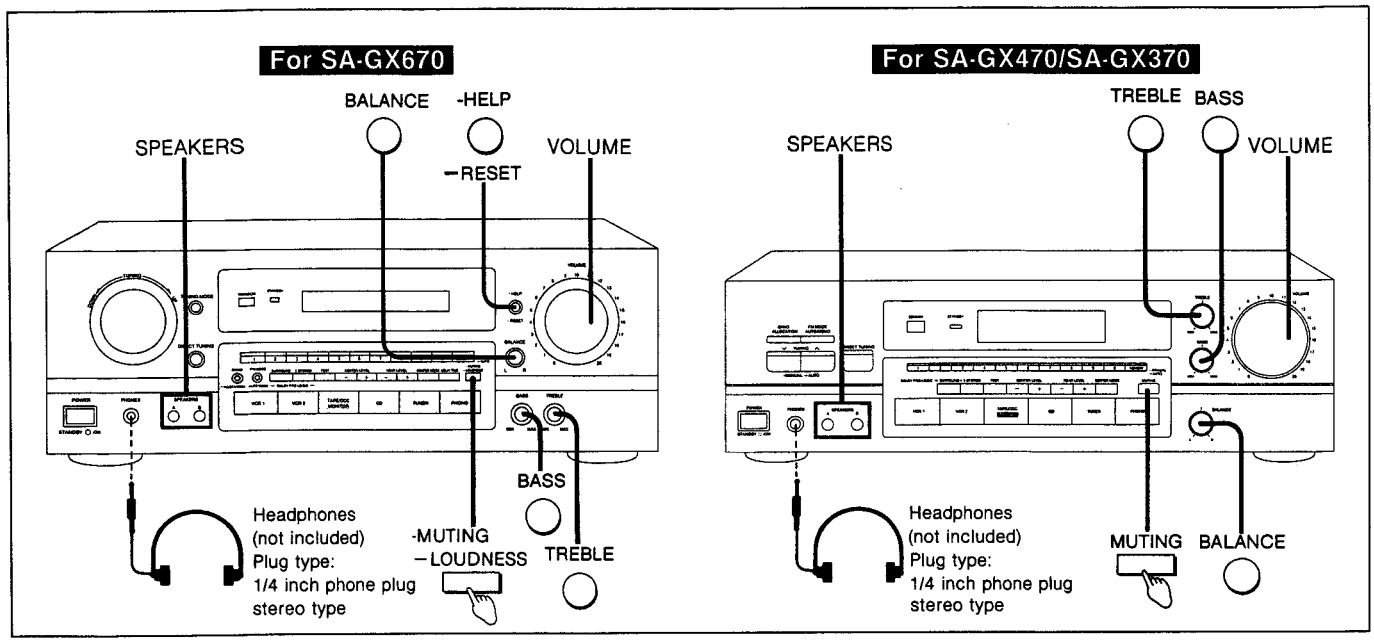
Be sure to reduce the volume level, and switch the power to the standby condition by pressing POWER.

When tape monitor indicator illuminates or is flashing (approx. 3 seconds)

This indicates that the tape monitor function of this unit is ON. To listen to sources other than a tape or DCC, be sure to turn off the indicator by pressing TAPE/DCC MONITOR.

Illuminates or is flashing





To listen to a desired audio source while watching a video

Select the desired video source and audio source in step 3 on the left.

Be sure to select the video source first.

To adjust the tone quality

BASS

Turn BASS to adjust the low-frequency sound.

TREBLE

Turn TREBLE to adjust the high-frequency sound.

To mute the sound level

-MUTING
-LOUDNESS

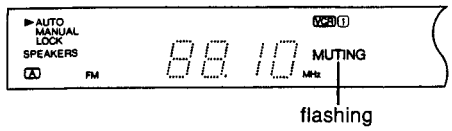
For SA-GX670

Press -MUTING momentarily.

MUTING

For SA-GX470/SA-GX370

Press MUTING.



Press once again to return to the previous volume level. (The muting indicator will turn off.)

To adjust the sound balance

BALANCE

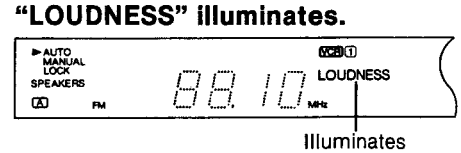
Turn BALANCE to adjust the left/right sound balance.

To emphasize low-frequency sound

SA-GX670 only

-MUTING
-LOUDNESS

Press -LOUDNESS until the "LOUDNESS" illuminates.



Press and hold the button until the "LOUDNESS" turns off to return to the previous condition.

To listen through headphones

Use VOLUME to reduce the volume level, and connect the headphones.

If sound from speakers is not wanted, press SPEAKERS (A) and/or (B) to turn off the speaker select indicators.

Note

Avoid listening for prolonged periods of time to prevent hearing damage.

If sound output stops during use

SA-GX670 only

-HELP

Press -HELP momentarily.

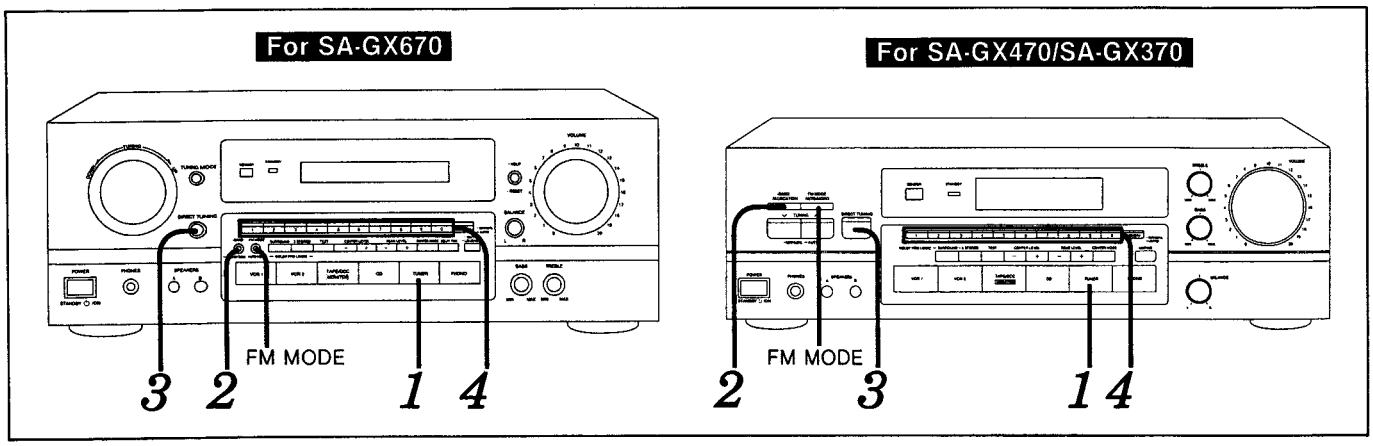
The help function can be used to show details of the operations you are expected to make on the display in character form.

For details, see page 26.

Listening to radio broadcasts

Direct access tuning

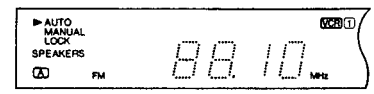
Specify the frequency using the numeric buttons to directly tune to the desired broadcast station.



The procedures described below are an example of SA-GX670.

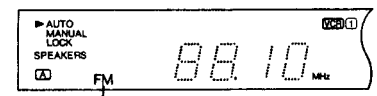
1 TUNER

Press TUNER.



2 -BAND

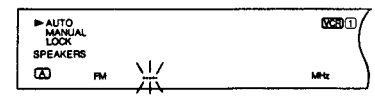
Press BAND to select "FM","MW" or "LW".



Illuminates

3 DIRECT TUNING

Press DIRECT TUNING.



While cursor display is flashing (approx. 10 seconds)

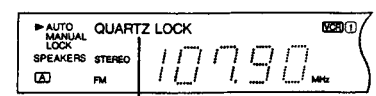
4 1 2 3 9 0

Press the appropriate numeric buttons to enter the frequency.

If the frequency has been input correctly, the frequency display will blink.

If the desired FM frequency is 107.90 MHz

1 → 0 → 7 → 9 → 0



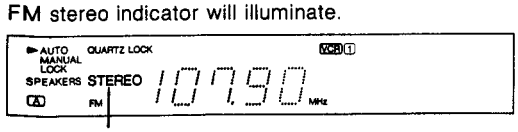
Illuminates when tuned

Note

1. If no button is pressed while the cursor display is flashing, the display will return to the frequency which is currently being received. To re-specify the frequency, repeat the procedure from step 3.
2. If the frequency has not been input correctly, an error message will be displayed. In this case, re-enter the frequency.

When the FM stereo broadcast is received:

This unit will automatically switch to FM stereo reception and the FM stereo indicator will illuminate.



Illuminates

If noise is excessive in the FM stereo mode

Press FM MODE. (The FM stereo indicator will switch off.)
The broadcast will be monaural, but noise will be reduced. If the button is pressed once more, stereo mode will be resumed.

To change the MW frequency step

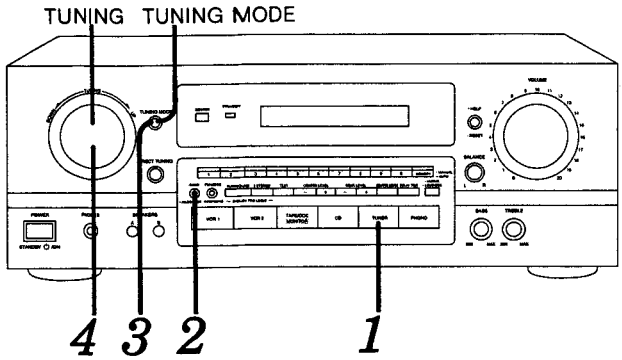
Press and hold BAND for about 3 seconds.
(The frequency step changes to 10 kHz per step.)
To return to the previous step, press and hold BAND for about 3 seconds again.

Sequential tuning For SA-GX670

If the frequency is not known, use the tuning control for searching.

Auto tuning

This automatically searches for broadcast stations which provide strong signal reception.



1 TUNER

Press TUNER.

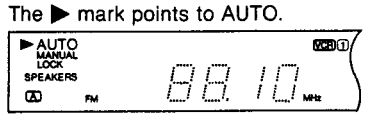
2 -BAND

Press BAND to select "FM", "MW" or "LW".

3 TUNING MODE

Press TUNING MODE to select "AUTO".

The ▶ mark points to AUTO.



4 TUNING

Turn TUNING until the frequency begins to change.

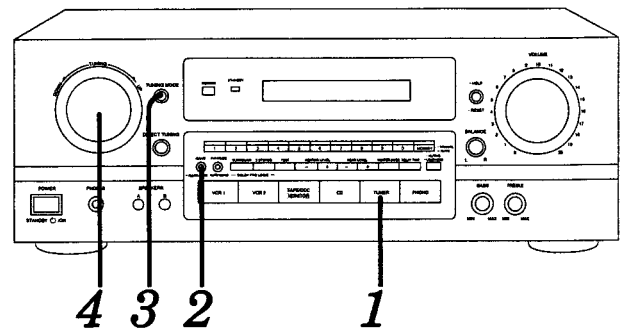
Automatically stops when a broadcast station is found.

Note

Tuning may stop automatically if any jamming is encountered.

Manual tuning

The frequency will change only by the amount that the tuning control is turned.



1 TUNER

Press TUNER.

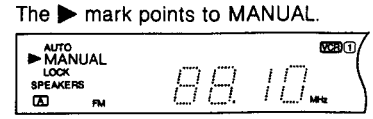
2 -BAND

Press BAND to select "FM", "MW" or "LW".

3 TUNING MODE

Press TUNING MODE to select "MANUAL".

The ▶ mark points to MANUAL.



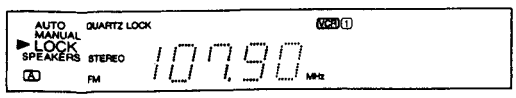
4 TUNING

Turn TUNING to tune to the desired broadcast.

Turn until the desired broadcast station is obtained.

To lock a broadcast station being received

Press TUNING MODE to select "LOCK".
The ▶ mark points to LOCK.

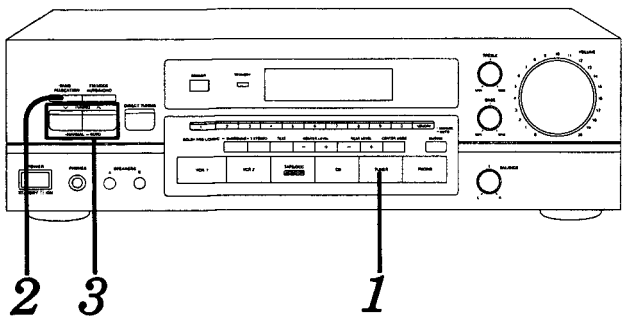


During this display, the frequency will not change even if TUNING is turned.

Sequential tuning

For SA-GX470/SA-GX370

If the frequency is not known, use the tuning buttons for searching.



1 TUNER

Press TUNER.

2 -BAND -ALLOCATION

Press BAND to select "FM", "MW" or "LW".

3 ∨ TUNING ∧

Press ∨ or ∧ to tune to the desired broadcast.

If either button is pressed and held down until the frequency begins to change, the broadcast stations can be tuned automatically when a broadcast station is found.

Note

Tuning may stop automatically if any jamming is encountered.

Preset tuning

By presetting the desired broadcast stations into the memory channels of this unit, broadcast stations can be selected simply by pressing numeric button(s). (Refer to page 20 for tuning.)

Before presetting

How many broadcast stations can be preset?

A total of 30 FM, MW and LW stations can be preset.

How is presetting done?

The two following methods are available.

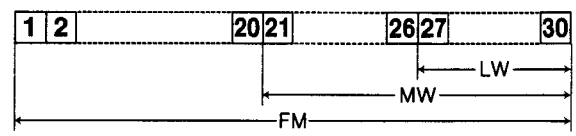
- **Automatic memory presetting**

Automatic memory presetting allows this unit to automatically search for broadcast stations and then preset them into memory.

With this function, searching proceeds from the frequency currently being displayed and continues to highest frequency, and broadcast stations are preset in the order in which they are located.

In this method, the channel ranges that can be preset into the memory for different bands (FM, MW or LW) are set as follows.

Channel



For example, after presetting the FM band, if the MW band is preset, the previous presettings in the sections in the above illustration which overlap will be erased and the subsequent settings will be preset. Therefore, the FM band stations will be kept for channels 1–20 and the MW band stations will be preset to channels 21–30.

- **Manual memory presetting**

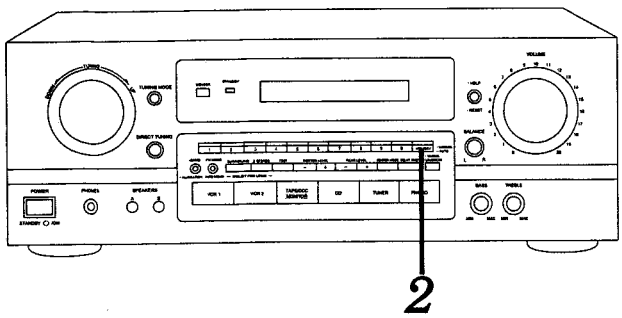
The desired broadcast stations can be preset into the desired channels by the user.

This can also be used as a method for changing selected broadcast stations that were preset in "Automatic memory presetting".

Note

If a new broadcast station is preset into a channel, the setting for the broadcast station which was previously entered in that channel will be automatically erased.

Automatic memory presetting



1

Set to the frequency from which you want to start automatic memory presetting. (Follow steps 1 through 4 on page 16.)

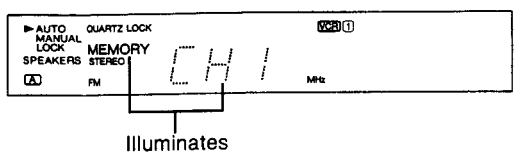
2 MEMORY

Press MEMORY until the frequency begins to change.
(Automatic memory presetting will start.)

To stop press MEMORY once again.

When a broadcast station is preset

The memory indicator and the preset channel number will be displayed for approximately 1 second.



Illuminates

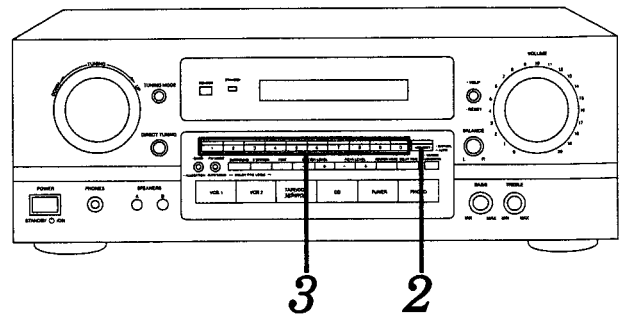
When presetting is completed

The last broadcast station to be preset will be displayed.

Note

Correct presetting may not be possible in cases where the broadcast waves are too strong or too weak. In such cases, carry out presetting manually.

Manual memory presetting

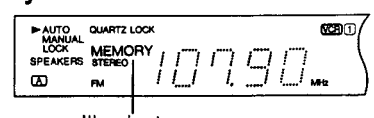


1

Set to the desired broadcast.
(Follow steps 1 through 4 on page 16 or 17 or steps 1 through 3 on page 18.) You can also set the stereo mode to the monaural position.

2 MEMORY

Press MEMORY momentarily.



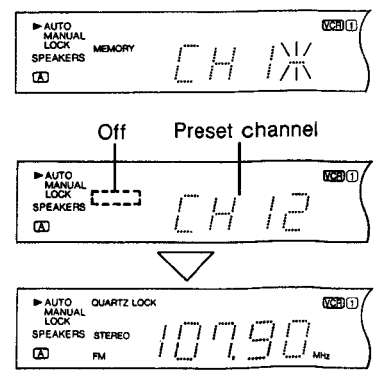
Illuminates

To cancel the memory function, press MEMORY again.

3 1 2 3 9 0

Specify the desired channel to be preset using the numeric button(s) (completes presetting).
(Example: Channel 12)

1 → 2 (Within 2 sec.)



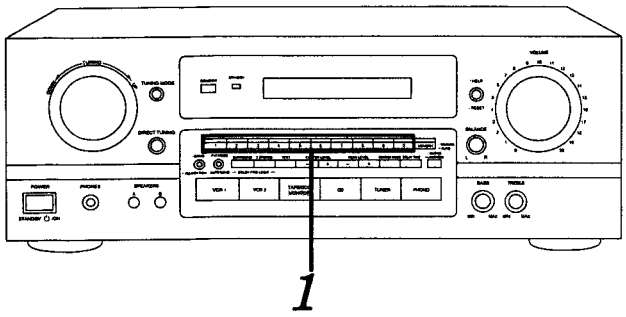
Off — Preset channel

To continue presetting

Repeat steps 1 through 3.

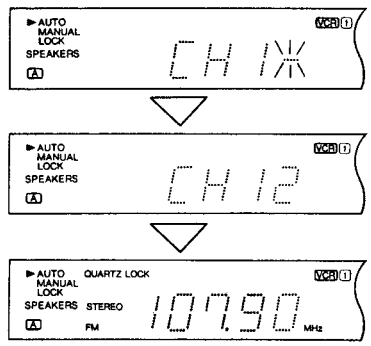
Preset tuning (continued)

To listen to preset broadcast stations



1 1 2 3 9 0 **Specify the preset channel using the numeric button(s).**
(Example: Channel 12)

1 → (Within 2 sec.) → 2



To confirm the channel number of the broadcast station being received

Press TUNER.
(The channel number will be displayed for about one second.)

Note

The channel number is not displayed if you change the reception frequency or FM mode setting.

For your reference:

Even if the power is switched to the standby condition or the power cord is disconnected from the household AC outlet, the contents of the memory will continue to be stored for approximately one month.

If frequency presettings are accidentally erased

Make the frequency presettings once again.
The power cord should remain connected for one hour or more for the memory back-up to be effective.

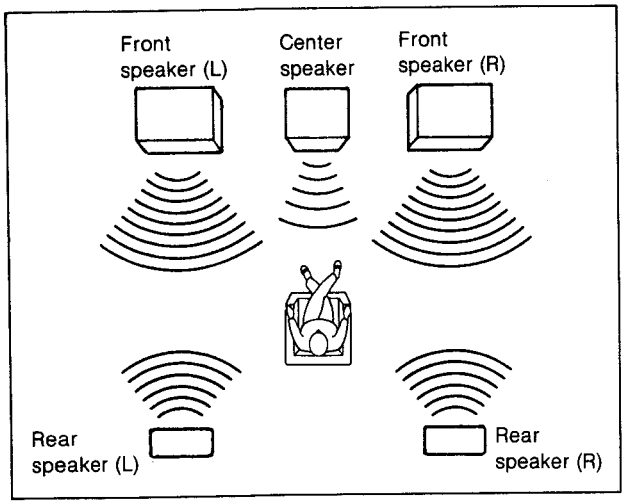
Enjoying sound with DOLBY PRO LOGIC

By combining front (A or B), center and rear speakers, SURROUND mode which conveys a feeling of presence or 3 STEREO mode which conveys a feeling of orientation can be enjoyed.

SURROUND

By reproducing the feeling of depth and movement of sound, video software or compact discs recorded with Dolby Surround provide the listener with a feeling of presence like that of a movie theater.

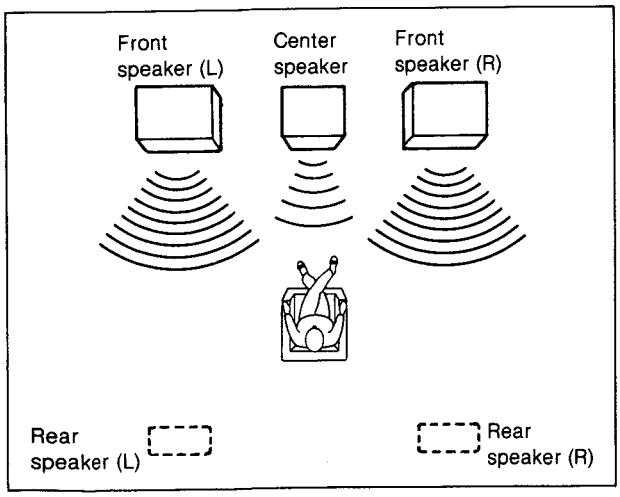
To enjoy SURROUND, be sure to connect the rear speakers.



3 STEREO

Music and news programs with clear sound and a good feeling of orientation can be enjoyed.

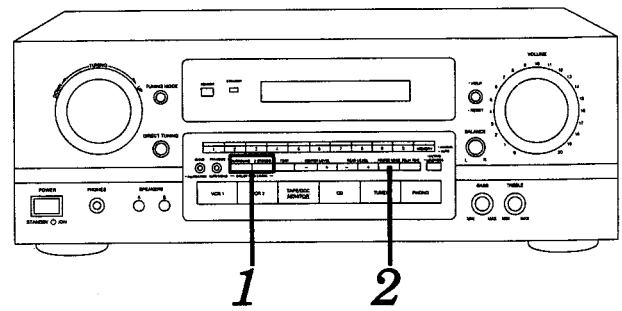
To enjoy 3 STEREO, be sure to connect the center speaker.



Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licenced under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590; Canadian numbers 1,004,603 and 1,037,877.
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Setting the center mode

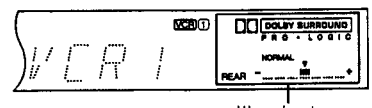
For Dolby Pro Logic systems, center mode setting is necessary to play back bass sounds effectively.
Set the center mode in accordance with the size of your center speaker.



1 SURROUND

Press SURROUND or 3 STEREO to turn on the desired mode.

For SURROUND mode

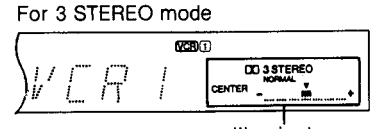


Illuminates

or

3 STEREO

For 3 STEREO mode

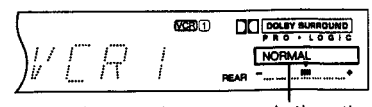


Illuminates

Press once again to turn it off.

2 CENTER MODE

Press CENTER MODE to select the correct center mode.



The indicator changes each time the button is pressed.

NORMAL:
When the center speaker is smaller than the front speakers

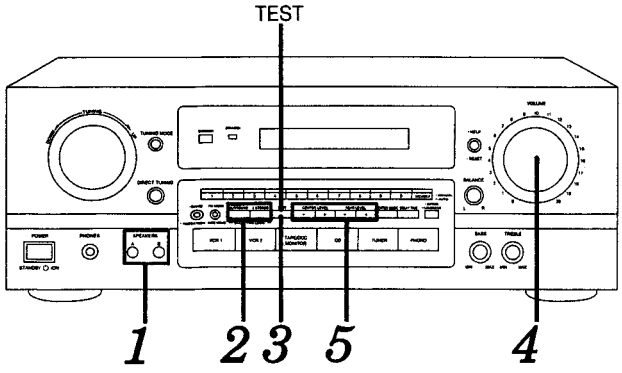
WIDE BAND:
When the center speaker is the same size as the front speakers

PHANTOM: SURROUND only
When no center speaker is connected.

Note
In the PHANTOM mode, the sound from the center speaker will be divided between both the left and right front speakers.

Adjusting the output level of each speaker

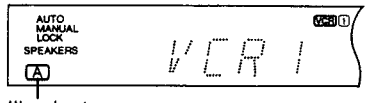
In order to reproduce the feeling of movement of the sound and clear orientation of sound, it is important to correctly adjust the output levels of each speaker. Adjust to the correct levels while listening to the test signal.



1

SPEAKERS A B

Press A or B to select the speaker system to be used.



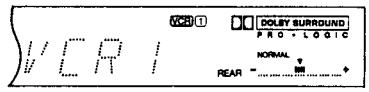
Illuminates

2

SURROUND

Press SURROUND or 3 STEREO to turn on the desired mode.

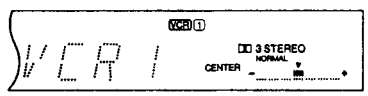
For SURROUND mode



or

3 STEREO

For 3 STEREO mode

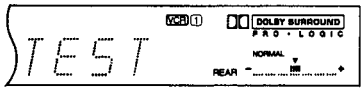


Press once again to turn it off.

3

TEST

Press TEST to output a test signal.



Test signal sounds sequentially as follows:

For SURROUND mode

Front speaker (left) → Center speaker → Front speaker (right) → Rear speakers (left, right) → Front speaker (left)

For 3 STEREO mode

Front speaker (left) → Center speaker → Front speaker (right) → Front speaker (left)

4

VOLUME

Turn VOLUME to set the volume level normally used for enjoying the source.

5

CENTER LEVEL

Press CENTER LEVEL (−) or (+) or REAR LEVEL (−) or (+) to adjust the output level balance.

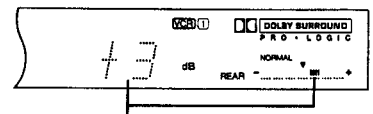
SURROUND only

REAR LEVEL

Adjust the output levels of each speaker at the listening position until they are all identical.

(−): Decrease the output level.

(+): Increase the output level.



The output levels can be varied within a range of −12 dB to +12 dB according to the output levels from the front speakers.

To stop the test signal

TEST

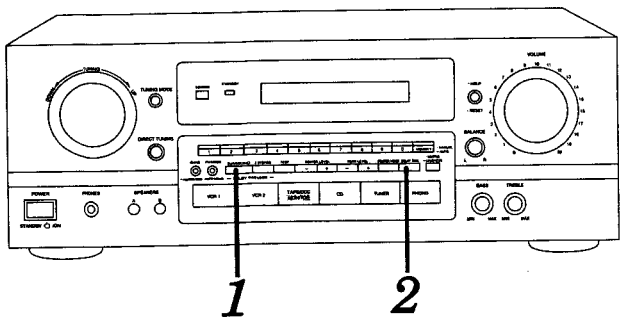
Press TEST.

Adjusting the delay time

SA-GX670 only

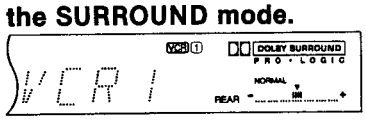
When enjoying with SURROUND only

Adjust so that the sound from the rear speakers is correctly oriented.



1 SURROUND

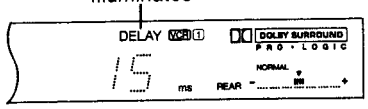
Press SURROUND to turn on the SURROUND mode.



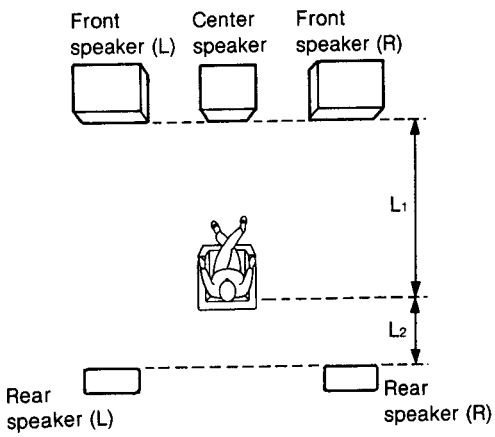
2 DELAY TIME

Press DELAY TIME to set to the suitable time.

Illuminates

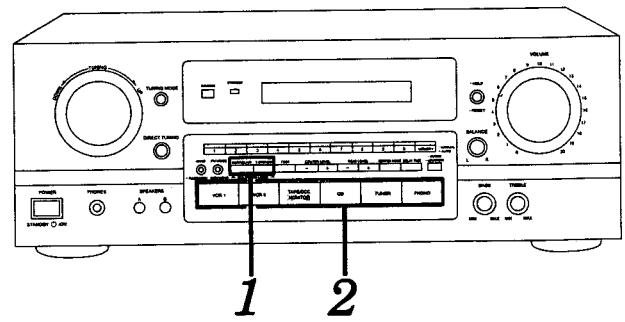


Each time the button is pressed, the delay time will increase by 5 ms.
To calculate the delay time, refer to the calculation methods below.



- **If $L_1 \leqq L_2$**
  Set to 15 ms.
- **If $L_2 < L_1$**
  Start at 15 ms and increase by 5 ms for every 5 feet of difference between L_1 and L_2.

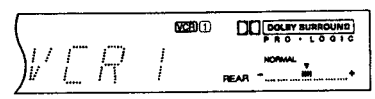
Enjoying with SURROUND or 3 STEREO



1 SURROUND

Press SURROUND or 3 STEREO to turn on the desired mode.

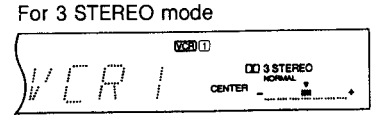
For SURROUND mode



or

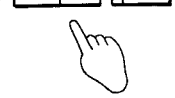
3 STEREO

For 3 STEREO mode



Press once again to turn it off.

2 **Select the desired source.**



3 **Start the desired source.**

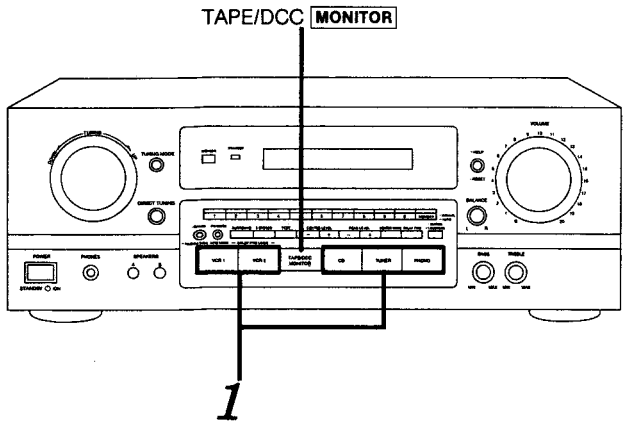
Note

When employing SURROUND, use software which has been recorded with Dolby Surround.

Making a recording

Tape recording on the tape deck or digital compact cassette deck (DCC)

Before recording, prepare the tape deck or DCC for recording (recording level adjustment, etc.).
See the tape deck's or DCC's operating instructions for details.



1 **Select the audio/video source to be recorded.**

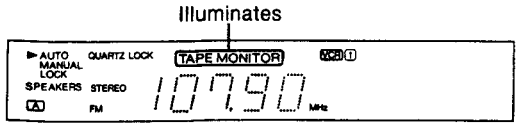
2 **Begin recording.**
Follow your tape deck's or DCC's operating instructions.

3 **Begin the audio/video source to be recorded.**

To check the sound recorded while recording is being made

With a tape deck with 3 heads, it is possible to check the sound recorded on the tape.

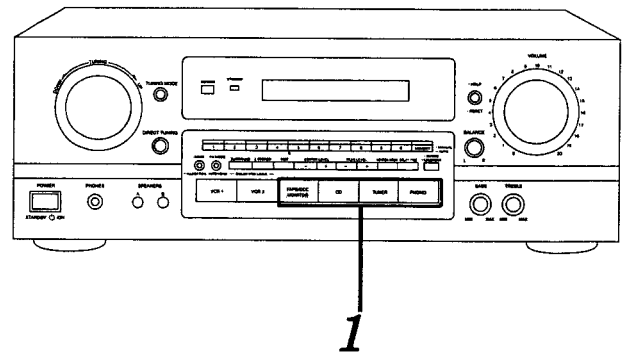
Press TAPE/DCC MONITOR on this unit and set the monitor button on the tape deck to "TAPE".



Press TAPE/DCC MONITOR once again to turn it off.

VCR (VCR 1) recording from an audio source

Before recording, prepare the VCR (VCR1) for recording (recording level adjustment, input selector setting, etc.).
See the VCR's operating instructions for details.



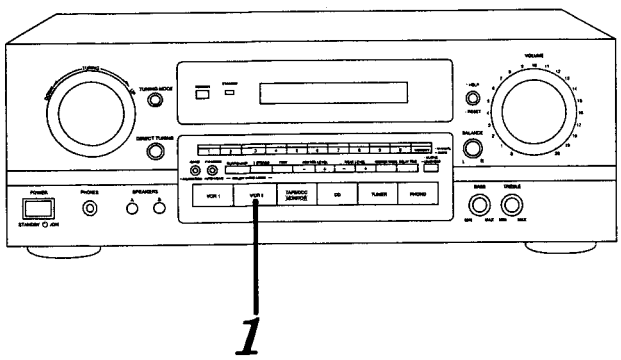
1 **Select the audio source to be recorded.**

2 **Begin recording on the VCR 1.**
Follow your VCR's operating instructions.

3 **Begin the audio source to be recorded.**

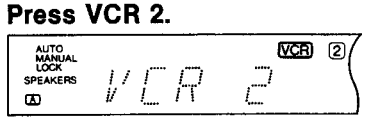
Recording from VCR 2 to VCR 1

Before recording, prepare the VCR (VCR 1) for recording (recording level adjustment, etc.).
See the VCR's operating instructions for details.



1 VCR 2

Press VCR 2.



2

Begin recording on the VCR 1 and playback the tape on the VCR 2.

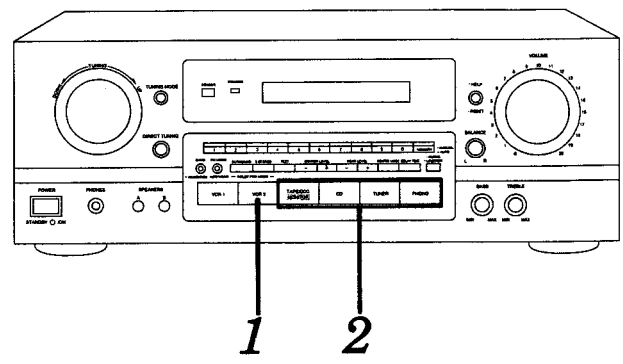
Follow your VCR's operating instructions.

For your reference:

If a laser disc player is connected to the "VCR 2" terminals, recording from the laser disc player is possible by following the above procedure.

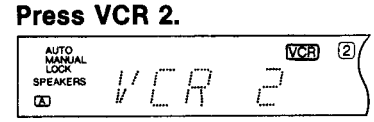
To record picture from VCR 2 and sound from a different audio source

Before recording, prepare the VCR (VCR 1) accordingly (recording level adjustment, input selector setting, etc.).
See the VCR's operating instructions for details.



1 VCR 2

Press VCR 2.



2 CD PHONO

Select the audio source to be recorded.

3

Begin recording on the VCR 1.

Follow your VCR's operating instructions.

4

Begin the audio source to be recorded and playback the tape on the VCR 2.

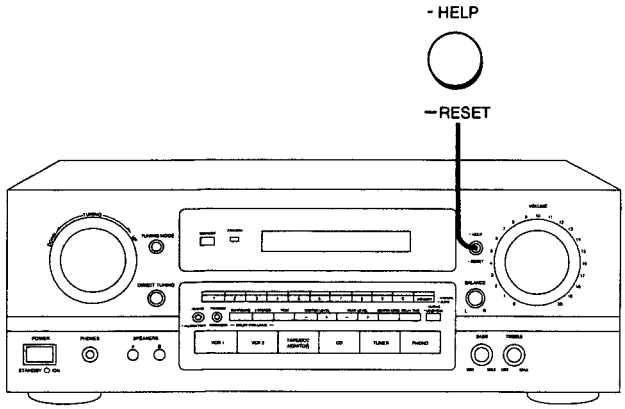
For your reference:

If a laser disc player is connected to the "VCR 2" terminals, recording a picture from the laser disc player is possible by following the above procedure.

About the HELP function

SA-GX670 only

If you make a mistake in operation or if sound output stops due to some operation which was performed, the HELP function displays characters which can be useful for indicating the method by which this condition can be remedied.
If "ERROR" or scrolling characters (for instance, "TAPE MONITOR ON NOW") appears on the display during operation, carry out the following operation.



Press -HELP momentarily.
The method for remedying this condition will be displayed.

For your reference:

If the above button is pressed for a longer period until "RESET" appears on the display, the operation settings for the unit will be initialized to the settings made at the time of shipment.
However, any broadcasting stations which have been preset into memory will not be erased at this time.

Technical specifications (DIN 45 500)

■ AMPLIFIER SECTION

Power output (at 240 V)
DIN 1 kHz (T.H.D. 1%)
(For United Kingdom and Europe)
[SA-GX670] 2 × 100 W (4 Ω)
[SA-GX470] 2 × 80 W (4 Ω)
[SA-GX370] 2 × 50 W (4 Ω)
(For others) [SA-GX670] 2 × 110 W (8 Ω)
[SA-GX470] 2 × 100 W (8 Ω)
20 Hz – 20 kHz continuous power output both channels driven
(For United Kingdom and Europe)
[SA-GX670] 2 × 65 W (8 Ω)
[SA-GX470] 2 × 50 W (8 Ω)
[SA-GX370] 2 × 30 W (8 Ω)
(For others) [SA-GX670] 2 × 90 W (8 Ω)
[SA-GX470] 2 × 80 W (8 Ω)
Total harmonic distortion
rated power at 20 Hz – 20 kHz 0.05% (8 Ω)
half power at 1 kHz 0.03% (8 Ω)
Power output at the Dolby Pro Logic operation
DIN 1 kHz (T.H.D. 1%)
Front (For United Kingdom and Europe)
[SA-GX670] 2 × 60 W (4 Ω)
[SA-GX470] 2 × 50 W (4 Ω)
[SA-GX370] 2 × 40 W (4 Ω)
(For others) [SA-GX670] 2 × 60 W (8 Ω)
[SA-GX470] 2 × 40 W (8 Ω)
Center (For United Kingdom and Europe)
[SA-GX670] 60 W (4 Ω)
[SA-GX470] 50 W (4 Ω)
[SA-GX370] 40 W (4 Ω)
(For others) [SA-GX670] 60 W (8 Ω)
[SA-GX470] 40 W (8 Ω)
Rear (For United Kingdom and Europe)
[SA-GX670] 30 W (4 Ω)
[SA-GX470] 25 W (4 Ω)
[SA-GX370] 20 W (4 Ω)
(For others) [SA-GX670] 60 W (8 Ω)
[SA-GX470] 20 W (8 Ω)
Intermodulation distortion
rated power at 60 Hz: 7 kHz = 4:1, SMPTE 0.5% (8 Ω)
Power bandwidth
both channels driven, –3 dB 10 Hz – 40 kHz (8 Ω)
Damping factor 40 (8 Ω)
Input sensitivity and impedance
PHONO 3 mV/47 kΩ
CD, VCR 1, VCR 2, TAPE/DCC 200 mV/22 kΩ
S/N at rated power (8 Ω)
PHONO 70 dB (IHF, A: 80 dB)
CD, VCR 1, VCR 2, TAPE/DCC 75 dB (IHF, A: 88 dB)
Frequency response
PHONO RIAA standard curve (30 Hz – 15 kHz) ±0.8 dB
CD, VCR 1, VCR 2, TAPE/DCC 10 Hz – 40 kHz, ±3 dB
Tone controls
BASS 50 Hz, +10 to –10 dB
TREBLE 20 kHz, +10 to –10 dB
Loudness control (volume at –30 dB) [SA-GX670 only] 50 Hz, +9 dB
Output voltage
VCR 1 OUT, TAPE/DCC REC (OUT) 200 mV
Channel balance (250 Hz – 6.3 kHz) ±1 dB
Channel separation 55 dB
Headphones output level and impedance 430 mV/330 Ω
Load impedance
A or B (For United Kingdom and Europe) 4 – 16 Ω
(For others) 8 – 16 Ω
A and B 8 – 16 Ω

■ FM TUNER SECTION

Frequency range	87.50 – 108.00 MHz
Sensitivity	
S/N 30 dB	1.5 µV/75 Ω
S/N 26 dB	1.3 µV/75 Ω
S/N 20 dB	1.2 µV/75 Ω
IHF usable sensitivity	(IHF '58) 1.5 µV/75 Ω
IHF 46 dB stereo quieting sensitivity	22 µV/75 Ω
Total harmonic distortion	
MONO	0.2%
STEREO	0.3%
S/N	
MONO	60 dB (75 dB, IHF)
STEREO	58 dB (71 dB, IHF)
Frequency response	20 Hz – 15 kHz, +1 dB, −2 dB
Alternate channel selectivity	
±400 kHz	65 dB
Capture ratio	1 dB
Image rejection at 98 MHz	40 dB
IF rejection at 98 MHz	70 dB
Spurious response rejection at 98 MHz	70 dB
AM suppression	50 dB
Stereo separation	
1 kHz	40 dB
Carrier leak	
19 kHz	−30 dB (−35 dB, IHF)
38 kHz	−50 dB (−55 dB, IHF)
Channel balance (250 Hz – 6.3 kHz)	±1.5 dB
Limiting point	1.2 µV
Bandwidth	
IF amplifier	180 kHz
FM demodulator	1000 kHz
Antenna terminal(s)	75 Ω (unbalanced)

■ AM TUNER SECTION

Frequency range	
MW	522 – 1611 kHz (9 kHz steps)
	530 – 1620 kHz (10 kHz steps)
LW	144 – 288 kHz
Sensitivity	
MW	20 µV, 330 µV/m
LW	45 µV
Selectivity	
MW (at 999 kHz)	55 dB
LW (at 252 kHz)	55 dB
Image rejection	
MW (at 999 kHz)	40 dB
LW (at 252 kHz)	40 dB
IF rejection	
MW (at 999 kHz)	55 dB
LW (at 252 kHz)	55 dB

■ VIDEO SECTION

Output voltage at 1 V input (unbalanced)	1 ±0.1 Vp-p
Maximum input voltage	1.5 Vp-p
Input/output impedance	75 Ω (unbalanced)

■ GENERAL

Power consumption	
(For United Kingdom and Europe)	[SA-GX670] 230 W
	[SA-GX470] 220 W
	[SA-GX370] 220 W
(For Australia and N.Z.)	[SA-GX670] 230 W
	[SA-GX470] 170 W
(For others)	[SA-GX670] 250 W
	[SA-GX470] 210 W
Power supply	
(For United Kingdom, Europe, Australia and N.Z.)	AC 50/60 Hz, 230 – 240 V
(For others)	AC 50/60 Hz, 110 – 127 V/220 – 240 V
Dimensions (W × H × D)	[SA-GX670] 430 × 158 × 352 mm
	[SA-GX470/SA-GX370] 430 × 136 × 352 mm
Weight	[SA-GX670] 9.5 kg
	[SA-GX470/SA-GX370] 8.6 kg

Notes:

1. Specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

For United Kingdom only

This apparatus was produced to BS 800.

Troubleshooting guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of authorized service centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
While listening to FM broadcasts		
An unusual hissing noise is heard when listening to the broadcast in stereo, but not heard when listening monaurally.	A slight noise may be heard because the method used for modulation of FM stereo broadcasts is different than that used for monaural broadcasts.	• Try reducing the treble sound by using the treble control. • Try changing the location, height and/or direction of the antenna. • If an indoor antenna is being used, change to an outdoor antenna. • Try using an antenna with more elements.
The FM stereo indicator or the quartz lock indicator flickers, without completely illuminating.	Poor location and/or direction of the antenna. Transmitting station is too far away.	• Try changing the location, height and/or direction of the antenna. • If an indoor antenna is being used, change to an outdoor antenna. • Try using an antenna with more elements.
While listening to AM broadcasts		
An unusual "beat" sound is heard.	Unit is being used at the same time as the television set.	• Turn off the television set, or use this unit farther away from it.
	Interference from adjacent broadcast signal.	• Try reducing the treble sound by using the treble control.
A low-pitched "hum" sound is heard when the broadcast is tuned.	The AM loop antenna connection wires are too close to the power cord.	• Place the antenna connection wires and the power cord farther apart.
	The power supply frequency from the power cord is modulated and heard from the speakers.	• Install a special outdoor antenna.
Problems noted at all times		
No sound is heard.	Both A and B speakers are turnd OFF. The tape monitor function is ON. The muting function is ON.	• Select the input select button for the source to which you wish to listen and press it one or two times. (The display will scroll through the causes of the problem.) Use this display as a guide to remedy the problem.
	Connections are incomplete or incorrect to the speaker systems, etc.	• Check to be sure that all connection wires are correctly connected.
	The incorrect input selector has been pressed.	• Check to be sure that the correct selector is pressed.
Sound stops during a performance, or no sound is heard when the power is switched ON. (The word "OVERLOAD" appears on the display.)	The protection circuitry has functioned because the positive and negative speaker connection wires are "shorted", speaker systems with an impedance less than the indicated rated impedance of this unit are used or under severe use, such as loud volume, excessive power and in an excessively hot environment.	• Switch off the power, and after determining and correcting the cause, switch on the power once again. • Use a speaker system of the proper impedance rating.
The DOLBY PRO LOGIC (SURROUND or 3 STEREO) indicator and speaker select indicators (A , B) are flashing. (The word "ERROR" appears on the display.)	When the Dolby Pro Logic system is ON, both A and B speakers are turnd ON.	• Turn off the Dolby Pro Logic system or one of the speakers.
	When both A and B speakers are being used simultaneously, the Dolby Pro Logic system is turned ON.	• Turn off one of the speakers.

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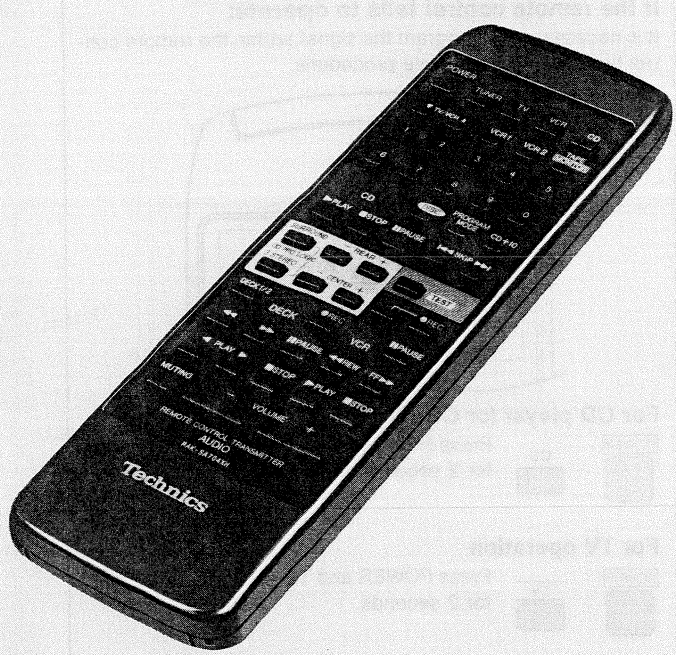
Technics

How to use the remote control transmitter

AV control stereo receiver

SA-GX670



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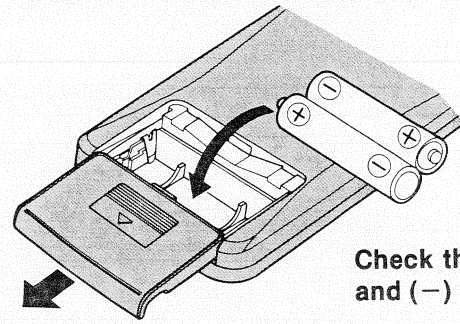
Battery installation

Insert the batteries included with this unit as shown below.



Check the (+) and (−) sides.

When you need to replace these batteries

Use two UM-4 "AAA", IEC R03 (1.5 V) or equivalent batteries.

Use of batteries

Do not mix old and new batteries, or batteries of different types (carbon and alkaline, etc.).

Always remove old, weak or worn-out batteries promptly and dispose of them properly.

The battery life is about one year.
Although the battery life varies depending on how often the device is used, the batteries should be replaced about once every year on the average.

The batteries should be replaced if commands from the remote control transmitter do not operate the unit even when transmitter is held close to the front panel.

Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.

If the remote control is not to be used for a long period of time, remove the batteries and store them in a cool, dark place.

If a battery leaks, remove all batteries and dispose of them properly. Thoroughly clean the battery compartment before inserting new batteries.
If the electrolyte comes into contact with skin or clothes, flush with water immediately.

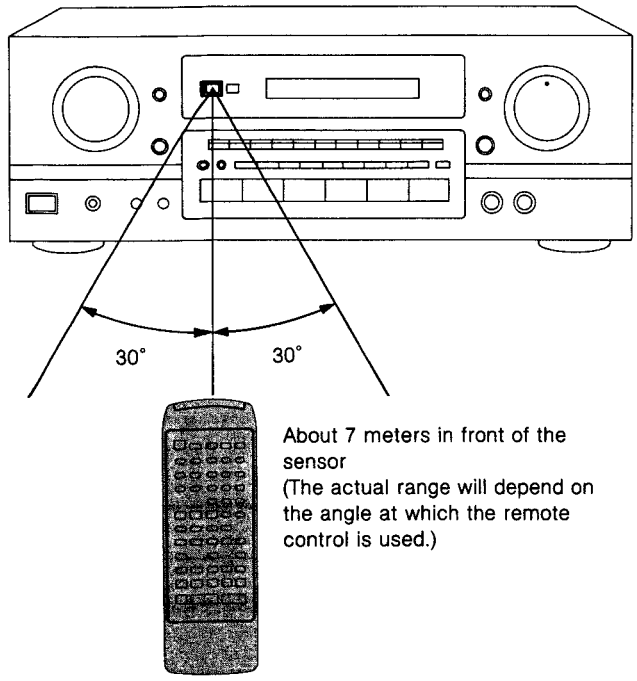
Keep batteries out of reach of children.

Do not use rechargeable (nickel-cadmium) type batteries.

Do not attempt to recharge alkaline or carbon batteries.

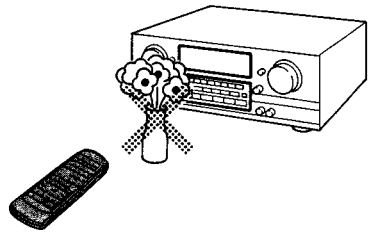
Method for use

Use the remote control within 60 degrees and within 7 meters facing directly toward the receiver's remote control signal receptor.

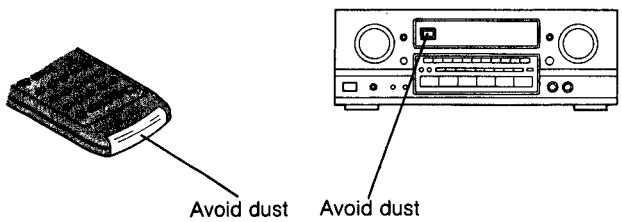


About 7 meters in front of the sensor
(The actual range will depend on the angle at which the remote control is used.)

Operation notes



Aim the remote control's transmission window toward the unit's sensor. Avoid any obstacles.



Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect performance.

The operation may not be correct if direct sunlight or another strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.

When operating a TV, VCR or a CD player (or CD changer) with a remote control sensor, face this remote control toward the remote control sensor of the unit to be operated.

Before use

This remote control transmitter can be used to operate units manufactured by this company other than this receiver unit, including CD players (or CD changers), tape decks and also TVs and VCRs.

Preparations before use

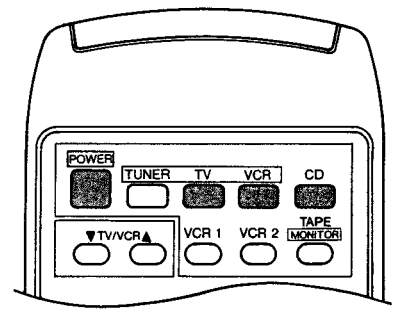
- Check the appropriate connection of the power cords and connection cables for the remote control in order to operate CD players (or CD changers) and tape decks correctly. (See page 8 of the operating instructions for the main unit.)
- Make sure that the power of each unit is set to the "ON" position, before beginning the operations.

Note

If you operate a TV, VCR or CD player (or CD changer) using this remote control, the unit may fail to operate due to the differing nature of the remote control signal.

If the remote control fails to operate:

It is necessary to reprogram the signal within the remote control by following this simple procedure.



For CD player (or CD changer) operation

Press POWER and CD simultaneously, hold for 2 seconds.

For TV operation

Press POWER and TV simultaneously, hold for 2 seconds.

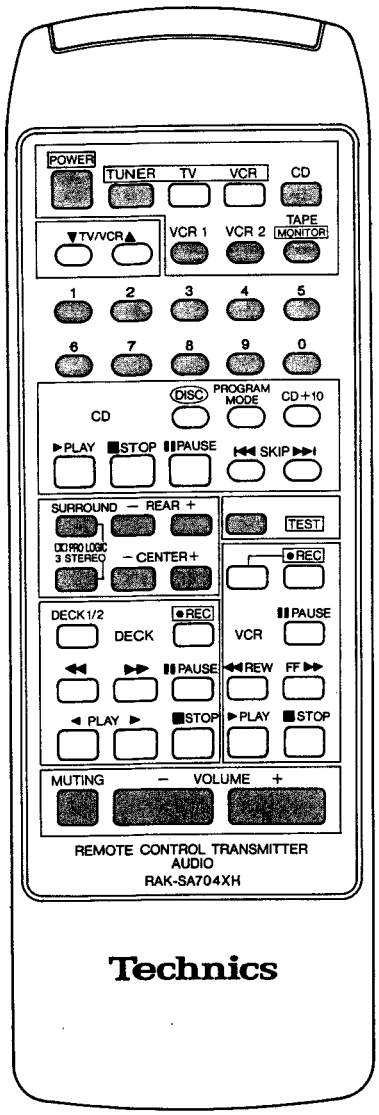
For VCR operation

Press POWER and VCR simultaneously, hold for 2 seconds.

To restore the previous memory contents, carry out the same operations one more time.

Depending on the model, there may be cases where operation is still not possible even if the remote control signal is switched over due to differences in frequency range characteristics.

Operating the receiver (SA-GX670)



Basic operations

To turn the unit ON/OFF	TUNER → POWER Once the unit has been set to ON, it can be turned ON and OFF simply by pressing POWER. (See *Note* below.)
To turn the tape monitor function ON/OFF	TAPE MONITOR To listen to sources other than a tape or DCC, be sure to turn off the tape monitor indicator on the main unit.
To select an input source	TUNER CD VCR 1 VCR 2
To turn the Dolby Pro Logic SURROUND mode ON/OFF	SURROUND
To turn the Dolby Pro Logic 3 STEREO mode ON/OFF	3 STEREO
To adjust the output level of the rear speakers	SURROUND → − REAR +
To adjust the output level of the center speaker	SURROUND or 3 STEREO → −CENTER+
To output a test signal	TEST Press once more to stop a test signal.
To mute the sound level	MUTING Press once more to return to the original volume.
To adjust the volume level	− VOLUME +

Note

After carrying out the operation on pages 6−7 for turning the TV or VCR ON or OFF, always press TUNER before pressing POWER when turning the receiver ON and OFF.

To listen to radio broadcasts

TUNER → 1 2 3 4 5 / 6 7 8 9 0

Specify the preset channel using the numeric button(s).

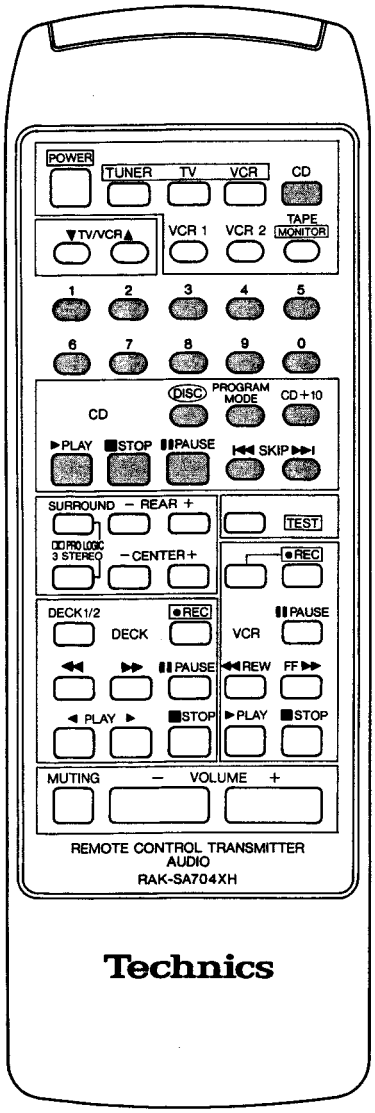
(Example: Channel 12)

1 → 2

(Within 2 sec.)

Listening to compact discs

For detailed information concerning CD player (or CD changer) operation, please read the operating instructions for each unit carefully.



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Note
Selecting the desired disc(s) is only applicable to a Technics CD changer.

Sequential play

▶PLAY

Direct access play

CD → DISC → 1 2 3 4 5 → 1 2 3 4 5 / 6 7 8 9 0 / CD+10

Select the desired disc.

Select the desired track number.
To select a two-digit track number over 10, press CD+10 the necessary number of times and then one of the 1 – 0 buttons.

Play will start from the selected track.

Program play

PROGRAM MODE → CD → DISC → 1 2 3 4 5

Select program mode. (1) (2) **Select the desired disc. (3)**

▶PLAY ← **Repeat the steps (1)–(4).** ← 1 2 3 4 5 / 6 7 8 9 0 / CD+10

Select the desired track number. (4)

Delete play (only for a Technics CD changer with delete play function)

PROGRAM MODE → CD → DISC → 1 2 3 4 5

Select delete mode. (1) (2) **Select the desired disc. (3)**

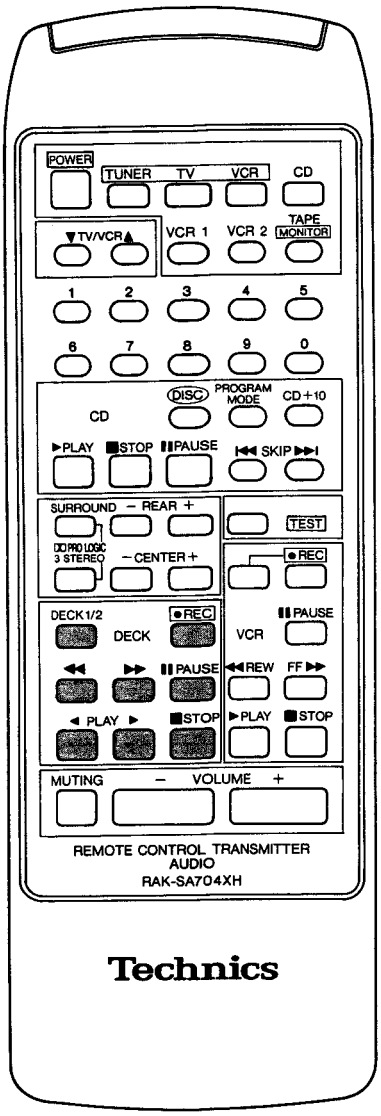
▶PLAY ← **Repeat the steps (1)–(4).** ← 1 2 3 4 5 / 6 7 8 9 0 / CD+10

Select the desired track number. (4)

To cancel program/delete mode	(In the stop mode) PROGRAM MODE	**For a Technics CD changer with delete play function** Press twice in program mode. Press once in delete mode.
To skip a track	SKIP	
To stop play temporarily	PAUSE	Press ▶PLAY to resume play.
To stop play	STOP	For program play and delete play, if this button is pressed while playback is stopped, all contents which have been input will be cleared.

Listening to tapes or recording on the tape deck

For detailed information concerning tape deck operation,
please read the operating instructions for each unit carefully.



To listen to tapes

Only when using a double cassette deck

DECK 1/2

Select tape deck (DECK 1 or DECK 2). ➡ ◄ PLAY ►

The remote control indicator of the cassette deck is changed over each time the button is pressed.

(Reverse) (Forward)

To cue or review	During playback ◄◄ ►►	For Technics tape decks with the "music select" functions, these buttons can be used to select the desired tune during playback.
To fast-forward or rewind the tape	In the stop mode ◄◄ ►►	
To stop playback temporarily	❚❚PAUSE	To resume playback, press the "PLAY" button corresponding to the side of the tape being played.
To stop play	■STOP	

To record on the tape deck

DECK 1/2

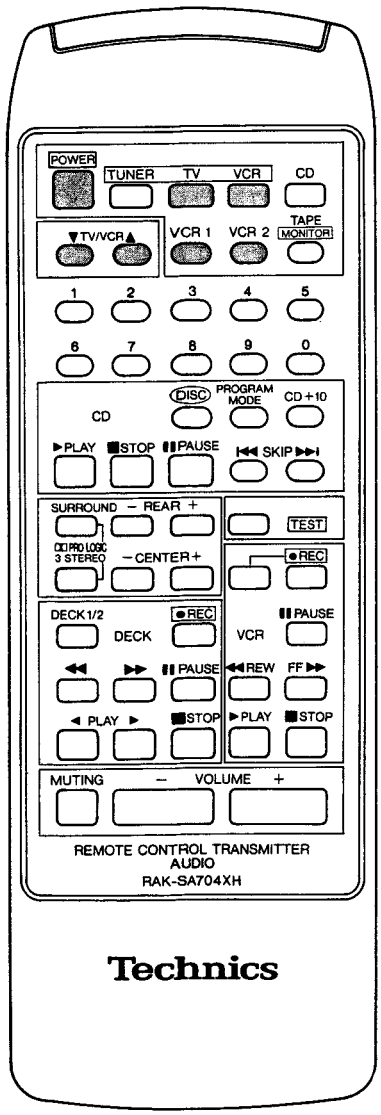
Select tape deck to be recorded. ➡ ●REC ➡ ◄ PLAY ►

(Reverse) (Forward)

To stop recording temporarily	❚❚PAUSE	To resume recording, press the "PLAY" button corresponding to the side of the tape being recorded upon.
To stop recording	■STOP	

Watching TV broadcasts

For detailed information concerning TV or VCR operation,
please read the operating instructions for each unit carefully.



To watch TV broadcasts with a VCR tuner

Facing toward the TV

TV → POWER

Turn ON the TV.

Facing toward the VCR

VCR → POWER

Turn ON the VCR.

Set the TV/VIDEO mode on the TV to "VIDEO".

Facing toward the receiver

VCR 1 (or VCR 2)

Select according to the VCR to be used.

Facing toward the VCR

▼TV/VCR▲

Select the desired channel.

To watch TV broadcasts with just a TV

Facing toward the TV

TV → POWER

Turn ON the TV.

Set the TV/VIDEO mode on the TV to "TV".

Facing toward the TV

▼TV/VCR▲

Select the desired channel.

To turn OFF the TV

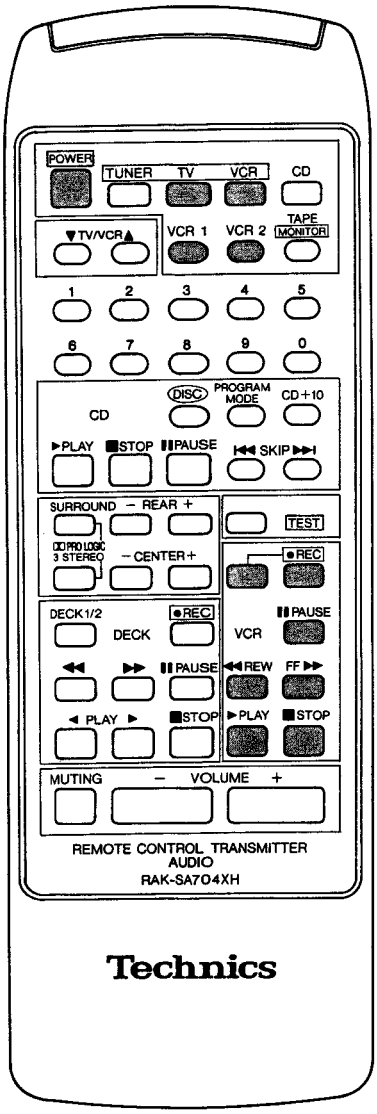
TV → POWER

To turn OFF the VCR

VCR → POWER

Watching video tapes or recording TV broadcasts

For detailed information concerning TV or VCR operation,
please read the operating instructions for each unit carefully.



To watch video tapes

Facing toward the TV → [TV] → [POWER] **Turn ON the TV.**

→ Facing toward the VCR → [VCR] → [POWER] **Turn ON the VCR.**

→ **Set the TV/VIDEO mode on the TV to "VIDEO".**

→ Facing toward the receiver → [VCR 1] (or [VCR 2]) **Select according to the VCR to be used.**

↓

Facing toward the VCR → [▶PLAY]

To fast-forward or rewind the video tape	In the stop mode [◀◀REW] [FF▶▶]
To stop playback temporarily	[❚❚PAUSE] Press again to start the playback.
To stop playback	[■STOP]

To record TV broadcasts on the VCR

Set the input selector on the VCR to the "TUNER" position → **Select the desired channel with a VCR tuner. (See page 6.)** → Facing toward the VCR [●REC]

Press these buttons simultaneously.
(Recording will begin.)

To stop recording temporarily	[❚❚PAUSE] Press again to start the recording.
To stop recording	[■STOP]

To turn OFF the TV

[TV] → [POWER]

To turn OFF the VCR

[VCR] → [POWER]

Troubleshooting guide

Problem	Probable cause(s)	Suggested remedy
Remote control transmitter does not function.	Batteries are incorrectly installed.	• Insert the batteries so that the positive (+) and negative (−) polarities are correct.
	There is an obstruction between the remote control transmitter and the receiver, TV or VCR.	• Remove the obstruction.
	The remote control transmitter is not correctly facing the receiver, TV or VCR.	• Face the remote control transmitter correctly toward the signal receptor of each unit.
	The remote control transmitter batteries are drained.	• Replace them with new batteries.

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